

Supporting Information for
Electing Peace: From Civil Conflict to Political Participation
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¹ Please note that figures and tables in this supporting information are also used in Aila M. Matanock. 2018. “External Engagement: Explaining the Spread of Electoral Participation Provisions in Civil Conflict Settlements.” *International Studies Quarterly*, and Aila M. Matanock. 2017. “Bullets for Ballots: Electoral Participation Provisions and Enduring Peace after Civil Conflict.” *International Security* 41(4): 93-132. The supporting information for those publications, which overlap with this supporting information, also may be useful for readers. Coding notes by case, as well as code for various robustness checks, can also be provided by the author upon request.

Chapter 3 Appendix

Coding Peace Agreements and Electoral Participation Provisions

This section lists each peace agreement and its coding on the relevant dimensions; these data are used in the analyses in Chapters 4 and 6.

Table A3.1: Electoral Participation Provisions and Peace Agreement Failure

<u>Government, Militant Group, Year of Agreement:</u>	<u>Electoral Participation Provisions:</u>	<u>Dyadic Peace (Five Years):</u>
Afghanistan HII 1996	No	Holds***
Afghanistan HII 1993	Yes	Fails
Afghanistan HII 1993	Yes	Fails
Afghanistan HIII 1993	Yes	Holds***
Angola UNITA 1989	No	Fails
Angola UNITA 2002	Yes	Holds
Angola UNITA 1991	Yes	Fails
Angola UNITA 1994	Yes	Fails
Bangladesh (Chittagong Hill Tracts) JSS/SB 1997	No	Holds
Bosnia and Herzegovina (Croat) Croat 1994	No++	Holds
Bosnia and Herzegovina (Serb) Serb 1995	Yes	Holds
Burundi CNDD 2000	Yes	Holds
Burundi FROLINA 2000	Yes	Holds
Burundi CNDD-FDD 2003	Yes	Holds
Burundi PALIPEHUTU 2000	Yes	Holds
Cambodia KR 1991	Yes	Fails
Cambodia KPNLF 1991	Yes	Holds
Cambodia FUNCINPEC 1991	Yes	Holds
Chad MDD 1999	No	Holds
Chad FNT 1994	No	Holds
Chad CSNPD 1994	No	Holds
Chad CNR 1993	No	Fails
Chad FNT 1992	No	Fails
Chad MDD 1995	No	Fails
Chad MDJT 2002	No	Fails
Chad CDR or FNT 1997	Yes	Holds
Chad FARF 1998	Yes	Holds
Chad MDJT 2005	Yes	Holds
Chad FAN 1978	No	Fails
Chad FAN 1978	No	Fails*
Chad FAN 1979	No	Fails
Chad FAP 1979	No	Fails**
Colombia FARC 1999	No	Fails
Colombia FARC 2002	No	Fails

Colombia	EPL	1991	Yes	Holds***
Comoros (Anjouan)	MPA	2000	No	Holds
Comoros (Anjouan)	MPA	2001	Yes	Holds*
Comoros (Anjouan)	MPA	2003	Yes	Holds*
Congo	Ninjas	1999	No++	Fails**
Congo	Cocoyes	1999	No++	Holds
Congo	Ntsiloulous	1999	No++	Fails
Croatia (Serb)	Krajina	1995	No	Holds
Democratic Republic of Congo	MLC	1999	No+	Fails
Democratic Republic of Congo	RCD	1999	No+	Fails
Democratic Republic of Congo	MLC	2003	Yes	Holds
Democratic Republic of Congo	RCD	2003	Yes	Holds
Democratic Republic of Congo	RCD-ML	1999	No+	Fails
Democratic Republic of Congo	RCD-ML	2003	Yes	Holds
Djibouti	FRUD	1994	Yes	Holds
Djibouti	FRUD-AD	2001	Yes	Holds
El Salvador	FMLN	1992	Yes	Holds
Georgia (Abkhazia)	Abkhazia	1994	No	Holds
Guatemala	URNG	1991	No	Fails
Guatemala	URNG	1996	Yes	Holds
Guinea Bissau	junta	1998	Yes	Fails
Haiti	military	1993	No	Holds
India (Bodoland)	ABSU	1993	No	Holds
India (Tripura)	ATTF	1993	No	Fails
India: Tripura	TNV	1988	No	Holds
Indonesia (Aceh)	GAM	2002	No	Fails
Indonesia (Aceh)	GAM	2005	Yes+++	Holds
Israel (Palestine)	PLO/Fatah	1995	No	Fails
Israel (Palestine)	PLO/Fatah	1999	No	Fails
Israel (Palestine)	PNA	1999	No	Fails
Ivory Coast	MJP	2003	No	Fails
Ivory Coast	MJP	2003	No	Fails
Ivory Coast	MPCI	2003	No	Fails
Ivory Coast	MPCI	2003	No	Fails*
Ivory Coast	FN	2005	Yes	Holds
Ivory Coast	MPIGO	2003	No	Fails
Ivory Coast	MPIGO	2003	No	Fails
Ivory Coast	MJP	2004	Yes	Fails*, **
Ivory Coast	MPCI	2004	Yes	Fails*, **
Ivory Coast	MPIGO	2004	Yes	Fails*, **
Liberia	INPFL	1991	No	Holds
Liberia	NPFL	1991	No	Holds
Liberia	LURD	2003	Yes	Holds

Liberia	NPFL	1993	Yes	Holds*
Liberia	NPFL	1994	Yes	Holds*
Liberia	NPFL	1995	Yes	Holds*
Liberia	NPFL	1996	Yes	Holds*
Liberia	MODEL	2003	Yes	Holds
Macedonia	UCK	2001	Yes	Holds
Mali (Azawad)	MPA	1991	No	Holds*
Mali (Azawad)	MPA	1992	No+	Holds
Mauritania: Western Sahara	POLISARIO	1979	No	Holds
Mexico	EZLN	1996	No	Holds
Moldova (Dniestr)	PMR	1997	No	Holds
Mozambique	RENAMO	1992	Yes	Holds
Mozambique	RENAMO	1984	No	Fails
Niger	FLAA	1993	No	Holds
Niger (Air and Azawad)	CRA	1995	No+	Holds
Papua New Guinea (Bougainville)	BRA	1991	No	Fails
Papua New Guinea (Bougainville)	BRA	1994	No	Fails
Papua New Guinea (Bougainville)	BRA	2001	Yes+++	Holds
Philippines military faction		1995	No	Holds
Philippines (Mindanao)	MILF	2001	No	Fails
Philippines (Mindanao)	MNLF	1996	Yes+++	Holds
Philippines: Mindanao	MNLF	1976	No	Fails
Philippines: Mindanao	MNLF	1987	No	Fails
Rwanda	FPR	1993	Yes	Fails
Senegal (Casamance)	MFDC	2004	No	Holds***
Sierra Leone	RUF	1996	No	Fails
Sierra Leone	RUF	1999	Yes	Fails
Sierra Leone	RUF	2000	Yes	Holds
Somalia	SPM or USC	1993	No	Holds
Somalia	USC/SNA	1997	No	Fails**
Somalia	USC/SNA	1994	No	Fails
South Africa	ANC	1993	Yes	Holds
South Africa: Namibia	SWAPO	1978	No	Fails
Sudan (Southern Sudan)	SPLM/A	2005	Yes	Holds
Sudan	NDA	2005	Yes	Holds
Sudan	SPLM/A	1988	No	Fails
Tajikistan	UTO	1997	Yes	Fails
Uganda	UNRF II	2002	No	Holds
Uganda	UPDA	1988	No	Holds
Uganda	NRA	1985	No	Fails
UK (Northern Ireland)	PIRA	1998	Yes	Holds
Yugoslavia (Kosovo)	Kosovo	1999	No	Holds
Yugoslavia (Slovenia)	Slovenia	1991	No	Holds

Zimbabwe (Rhodesia)	PF	1979	No+	Holds
Zimbabwe (Rhodesia)	ANC	1975	No	Holds

*Also coded (in Chapter 6) as dropping since these are renegotiations of previous agreements without a return to conflict in between.

**Also coded as holding under alternative specification not using UCDP-coded alliances.

***Also coded as failing under alternative specification more than 5 years later (although likely splinters) or through an unrelated coup.

+Also coded as yes under a more inclusive coding of expectations of electoral participation that anticipates that all groups will be allowed to participate.

++Also coded as yes under a more inclusive coding of expectations of electoral participation for all parties that participated before the conflict.

+++Also coded as no under a less inclusive coding of no expectations of electoral participation for territorial militant groups in regional transitional bodies.

Chapter 4 Appendix
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Causes

Additional Notes on the Coding of the Dependent Variable of Interest

The conflict data and the peace agreement data do not perfectly match in the UCDP/PRIO coding, and so the following differences exist in the conflict data compared to the peace agreement data (for which each row is listed in the Chapter 3 Appendix).

Many of the peace agreements are followed by continued fighting, and so they were not included by Kreutz 2010, which requires a year with the conflict below the 25 battle death threshold before it enters the UCDP/PRIO dataset that he codes. This causes some differences. In addition, some peace agreements follow periods in which the conflict drops below the battle death threshold; in some cases, Kreutz 2010 codes these as a ceasefire or a petering out of fighting,² but I consider the dyad to continue to be a candidate for a peace agreement for eight years (which is the longest duration until a peace agreement is finalized in the data). This causes other differences.

There are also peace agreements in the conflict data that do not exist in the peace agreement data (i.e. Kreutz 2010 codes these cases as terminating through peace agreements but they are not coded as such in the peace agreement data), so I include these. They are:

- Bosnia and Herzegovina: Croatian and Serbian irregulars enter as an additional PAs because they also terminate in the same year with an agreement (and they are coded the same as the Serbian force, “8,” and the Croatian force, “1,” respectively).
- Cambodia: FUNCINPEC is coded as signing an additional deal in 1997 is not in the PA data (coded in the CT data as a “1”).
- Colombia: M-19 is coded as signing a deal in 1989 is not in the PA data (coded in the CT data as an “8”).
- Croatia: Serbian irregulars enter as an additional PAs because they also terminate in the same year with an agreement (and they are coded the same as the Serbian force, “1,” although 1994 not 1995*).
- Indonesia: Fretilin is coded as signing a deal in 1999 is not in the PA data (coded in the CT data as a “1”).
- Israel: Fatah is 1999 is not considered active in the CT data between 1995 and 1999, so that agreement is missing in the CT set compared to the PA set.
- South Africa: SWAPO is coded as signing a deal in 1988 is not in the PA data (coded in the CT data as a “1”).

In addition, there are a few peace agreements in which multiple militant groups sign, but only one active group is among them, which must be specified in the conflict data.

- Chad: FNT is coded as signing the 1997 agreement since it is either the FNT or CDR in the PA data (which ended with a “4” in 1987 according to the CT data). **Note:** this perhaps should be treated as a renegotiation since FNT also signed a prior peace agreement, but it is included because the identity of the group is ambiguous; coding it as a renegotiation would cause it to drop from the Chapter 6 analysis (again, the results of these analyses hold when Chad is dropped).
- Somalia: SPM is coded as signing the 1993 agreement since it is either them or USC (which ended with a “4” in 1991 according to the CT data) (and the results of the analyses hold when Somalia is dropped).

Next, there is one case in which no conflict is ongoing when the peace agreement is signed, and so this case is only present in the peace agreement data and not in the conflict data.

- Haiti: Military faction (forces of Raoul Cedras) is not active in UCDP after 1991 termination with a victory (“4”). The later Haiti PA in 1993 is not included.

² In addition, Kreutz 2010 codes one case a victory in which a peace agreement follows within a month (FAP in Chad in 1979), so I also include that one, although dropping Chad does not change the results of the analyses.

Finally, there are cases that drop in the multinomial logistic regression analysis only (but not in the alternative competing risks analysis) because each is signed after another has failed in the same year (but note that they all have the same electoral participation provisions as their predecessors).

- Afghanistan HII 1993
- Ivory Coast MPCI 2003
- Ivory Coast MPIGO 2003

Table A.4.1: Summary Statistics, Peace Agreement Data*

	Mean	Stan. Dev.	Obs.
Electoral Participation Provisions(=1) ^a	0.42	0.50	122
<i>Independent Variables of Interest</i>			
Cold War(=1)	0.12	0.33	122
Regional Election Observation(Percent, Lagged)(=0-1)	0.61	0.31	122
Regional Democracy & Governance Assistance (Percentage of Development Aid, Lagged 2-year average) (=0.01-0.19)	0.08	0.06	107
Oil Production Indicator (Lagged)(=1)	0.44	0.50	122
U.S. Military Aid Indicator (Lagged)(=1)	0.43	0.50	122
Former British Colony(=1)	0.21	0.41	122
Former French Colony(=1)	0.34	0.48	122
<i>Control Variables*</i>			
<i>(Duration and Battle Deaths)</i>			
Conflict Duration (Dyad)(=0-38)	6.98	7.49	122
Major Conflict Indicator (Based on Battle Deaths, Used as Alternative)(=1)	0.71	0.45	122
<i>(Government Capacity)</i>			
Balance between Group and Government Capacity(=0 “parity,”1 “stronger,”2 “much stronger”)	1.04	0.67	120
Government Military Personnel (1000s, Logged, Lagged)(=0-7.14)	3.46	1.40	115
Rebel Fighters (Logged, During Conflict)(=0.20-62.50)	8.76	1.43	108
Population in 1000s (Lagged)(=0.53-870.11)	40.19	132.52	122
Real GDP per 1000 Inhabitants (Lagged)(=0.16-27.02)	2.34	4.21	122
<i>(Regime Type)</i>			
Regime Type(Lagged)(=0-4)	2.79	1.21	122
Democracy Level(Lagged)(=9-10)	0.34	4.81	122
Ever Democracy (since 1945)(=1)	0.56	0.50	122
Change in Democracy over Past 5 Years(=-1-1)	0.00	0.34	122
<i>(Governance Quality)</i>			
Corruption (Lagged)(=0-5)	2.27	1.11	78
Bureaucratic Quality (Lagged)(=0-4)	1.04	1.26	78
Law and Order (Lagged)(=0-6)	2.18	1.16	78
<i>(Stakes or Rebel Aims)</i>			
Territorial Conflict(=1)	0.30	0.46	122
Identity Conflict(=1)	0.79	0.41	121
Marxist Conflict(=1)	0.16	0.36	122
Militant Groups with Total Goals(=1)	0.74	0.44	121
<i>(Agreement Difficulty)</i>			
Past Agreement(s)(=0-4)	0.48	0.79	122
Factions Fighting(=1-10)	2.90	2.43	121
<i>(International Aid and Ties)</i>			
U.N. Peacekeeping Mission(Present Prior to Agreement)(=1)	0.23	0.42	122
Regional Democracy Level (Lagged)(=0.07-0.88)	0.31	0.21	122
Post-9/11(=1)	0.22	0.42	122
Aid as a Share of GDP (Lagged)(=0-0.26)	0.05	0.05	120
Trade as a Share of GDP (Lagged)(=1.62-197.93)	54.69	32.03	122
Member of GATT or WTO (Lagged)(=1)	0.65	0.48	122

*Note: alternatives measures for the variables are discussed in the controls section of the paper; more detail on all measures, including sources, is available in Codebook.

a: In both datasets, conflict and peace agreements, the distinction is between those with and those without provisions in peace agreements to hold elections and allow both sides to participate as political parties, not implementation or not (although that is coded as an alternative).

Table A.4.2: Summary Statistics, Conflict Data*

	Stan.		
	Mean	Dev.	Obs.
<i>Independent Variables of Interest</i>			
Cold War(=1)	0.39	0.49	3266
Regional Election Observation(Percent, Lagged)(=0-1)	0.41	0.35	3266
Regional Democracy & Governance Assistance (Percentage of Development Aid, Lagged 2-year average) (=0.01-0.19)	7.35	5.94	1498
Oil Production Indicator (Lagged)(=1)	0.62	0.48	3255
U.S. Military Aid Indicator (Lagged)(=1)	0.63	0.48	3243
Former British Colony(=1)	0.43	0.50	3266
Former French Colony(=1)	0.13	0.34	3266
<i>Control Variables*</i>			
<i>(Duration and Battle Deaths)</i>			
Conflict Duration (Dyad)(=0-38)	N/A	N/A	N/A
Major Conflict Indicator (Based on Battle Deaths, Used as Alternative)(=1)	0.72	0.45	3210
<i>(Government Capacity)</i>			
Balance between Group and Government Capacity(=0 “parity,”1 “stronger,”2 “much stronger”)	1.42	0.61	3183
Government Military Personnel (1000s, Logged, Lagged)(=0-7.14)	4.69	1.48	3113
Rebel Fighters (Logged, During Conflict)(=0.20-62.50)	8.31	1.46	2622
Population in 1000s (Lagged)(=0.53-870.11)	116.67	266.54	2868
Real GDP per 1000 Inhabitants (Lagged)(=0.16-27.02)	3.95	5.72	2844
<i>(Regime Type)</i>			
Regime Type(Lagged)(=0-4)	2.62	1.47	3258
Democracy Level(Lagged)(=9-10)	-0.33	6.68	3090
Ever Democracy (since 1945)(=1)	0.74	0.44	3197
Change in Democracy over Past 5 Years(=-1-1)	0.02	0.33	3197
<i>(Governance Quality)</i>			
Corruption (Lagged)(=0-5)	2.46	1.07	1859
Bureaucratic Quality (Lagged)(=0-4)	1.64	1.24	1863
Law and Order (Lagged)(=0-6)	2.83	1.33	1863
<i>(Stakes or Rebel Aims)</i>			
Territorial Conflict(=1)	0.47	0.50	3064
Identity Conflict(=1)	0.71	0.45	2910
Marxist Conflict(=1)	0.30	0.46	3118
Militant Groups with Total Goals(=1)	0.54	0.50	3241
<i>(Agreement Difficulty)</i>			
Past Agreement(s)(=0-4)	0.10	0.38	3266
Factions Fighting(=1-10)	2.18	1.77	3266
<i>(International Aid and Ties)</i>			
U.N. Peacekeeping Mission(Present Prior to Agreement)(=1)	0.06	0.24	3266
Regional Democracy Level (Lagged)(=0.07-0.88)	0.31	0.20	3197
Post-9/11(=1)	0.20	0.40	3266
Aid as a Share of GDP (Lagged)(=0-0.26)	0.03	0.04	2694
Trade as a Share of GDP (Lagged)(=1.62-197.93)	51.00	37.81	2844
Member of GATT or WTO (Lagged)(=1)	0.61	0.49	3266

*Note: alternatives measures for the variables are discussed in the controls section of the chapter; more detail on all measures, including sources, is available in the codebook.

Additional Tables Showing the Results of the Controls (Peace Agreement Data)

The following tables show the results considering the standards control variables in the peace agreement data that I discuss in the chapter's text. This table, along with Table A.4.5, form the basis for the summary Table 4.5 in the main text. (Additional control variables run in robustness checks are described in the codebook.)

**Table A.4.3: Inclusion of Electoral Participation Provisions in Peace Agreements—
Controls**

VARIABLES	<i>Duration & Deaths</i>	<i>Gov't Capacity 1</i>	<i>Gov't Capacity 2</i>	<i>Regime Type 1</i>	<i>Regime Type 2</i>	<i>Regime Type 3</i>	<i>Governance Quality</i>
Regional Election Observation	4.57*** (3.49)	4.67*** (3.56)	4.71*** (2.89)	3.87*** (2.88)	3.97*** (3.14)	4.69*** (3.31)	5.25*** (3.39)
Oil Production	-1.29*** (2.64)	-1.38*** (3.04)	-2.20*** (3.27)	-1.05** (1.99)	-1.62*** (2.66)	-0.93* (1.74)	-0.54 (0.71)
U.S. Military Aid	-1.44*** (3.20)	-1.48*** (3.21)	-1.68*** (3.04)	-1.36*** (3.00)	-1.36*** (2.69)	-1.03** (1.96)	-1.79** (2.25)
Former British Colony	-2.13** (2.28)	-2.16** (2.27)	-2.59* (1.88)	-1.60* (1.76)	-1.88** (2.42)	-1.72** (2.09)	-2.02** (2.15)
Former French Colony	-1.58*** (2.93)	-1.74*** (2.98)	-1.84** (2.13)	-1.75*** (3.67)	-2.10*** (3.20)	-1.85*** (4.34)	-3.99*** (3.67)
Conflict Duration	-0.29 (0.46)	-0.44 (0.68)	-1.11 (1.01)				
Major Conflict Indicator (Based on Battle Deaths)	-0.06 (0.89)	-0.08 (1.18)	-0.09 (0.99)				
Population	0.00 (0.37)						
Balance between Group and Government Capacity		0.31 (1.07)					
Government Military Personnel			-0.07 (0.19)				
Militant Group Fighters			0.05 (0.23)				
Real GDP per 1000 Inhabitants	0.12 (1.33)	0.12 (1.44)	0.15 (1.07)	0.01 (0.20)	0.06 (0.98)	0.01 (0.15)	
Regime Type				0.28 (0.84)			
Democracy Level				0.07 (0.92)			
Ever Democracy					-1.14* (1.65)		
Change in Democracy in Past 5 Years						-2.54** (1.99)	
Corruption							0.86* (1.88)
Bureaucratic Quality							-0.24 (0.61)
Law and Order							-0.24 (0.91)
Constant	-1.55 (1.53)	-1.76* (1.74)	-0.58** (0.29)	-1.65 (1.20)	0.04 (0.04)	-1.57 (1.47)	-2.64** (2.24)
<i>N</i>	107	107	77	107	107	107	73

See Table 4 notes. Numbers in parentheses are z-scores in these tables. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

**Table A.4.3: Inclusion of Electoral Participation Provisions in Peace Agreements—
Controls (Cont.)**

VARIABLES	<i>Agreement</i>					
	<i>Stakes</i>	<i>Difficulty</i>	<i>Int'l Ties 1</i>	<i>Int'l Ties 2</i>	<i>Int'l Ties 3</i>	<i>Trends</i>
Regional Election Observation	4.14*** (3.07)	3.40** (2.43)	3.44*** (3.07)	3.61*** (2.89)	3.65** (2.57)	4.64*** (3.00)
Oil Production	-1.17** (2.41)	-1.65*** (2.82)	-1.26** (2.33)	-1.28** (2.14)	-1.28** (2.28)	-1.02 (1.79)*
U.S. Military Aid	-1.18** (2.12)	-1.79*** (2.88)	-1.10** (2.17)	-1.08** (2.11)	-1.38*** (3.36)	-1.23** (2.18)
Former British Colony	-1.65 (1.89)*	-2.33*** (2.63)	-2.01** (2.12)	-2.06*** (2.58)	-1.65** (2.30)	-2.56*** (2.92)
Former French Colony	-2.13*** (4.48)	-1.50** (2.51)	-1.44*** (2.88)	-2.08*** (3.71)	-1.84*** (2.94)	-2.40*** (3.96)
Territorial Conflict	-0.57 (0.60)					
Identity Conflict	-0.73 (1.74)*					
Marxist Conflict	0.21 (0.26)					
Militant Groups with Total Goals	0.08 (0.09)					
Past Agreement		1.49*** (2.62)				
Factions Fighting		-0.24 (1.54)				
U.N. Peacekeeping Mission			1.30 (1.58)			
Regional Democracy Level				-1.13 (0.92)		
Post-9/11				0.67 (0.98)		
Aid as a Share of GDP					2.53 (0.36)	
Trade as Share of GDP					0.01 (0.93)	
Member of GATT or WTO					0.08 (0.12)	
Additional Controls						Region, Five-Year Indicators, Interaction Included
Constant	-0.29 (0.23)	0.14 (0.13)	-0.90 (1.04)	-0.21 (0.20)	-1.13 (1.02)	-2.27 (1.45)
<i>N</i>	106	101	107	107	106	101

See Table 4 notes. Numbers in parentheses are z-scores in these tables. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Competing Risks Analysis in More Detail

Multinomial Logistic Regression Analysis in More Depth

The following tables show the full models for the multinomial logistic regression analysis. In this analysis, the hazard probability that conflict i ends in a peace agreement with electoral provisions (ep) is:

$$\lambda_{ik} = \frac{ep^{X_i\beta_{ep}}}{\sum_k^K ep^{X_i\beta_k}}$$

Where K corresponds to all possible ways of conflict termination (k), X is a vector of covariates for conflict i , β_{ep} are the event-specific coefficients for conflicts that ended with electoral provisions, and the baseline event is continued conflict in the models presented in the analysis.

Other Approaches to Competing Risks Models

There are different approaches to estimate competing risks models, which vary depending on the nature of the time variable, the characteristics of the data, and even the size of the dataset. The approach that is used frequently in the literature is the multinomial logit (recently see Fortna 2015, Leiras et al. 2015). As described, in this context, this analysis would approximate asking in each year whether the combatants are deciding to stay in conflict, provided that they can end conflict through different types of termination. Fine and Gray's (1999) subdistribution hazard would more closely approximate asking what the probability is of the conflict ending through electoral participation provisions given that it has not yet ended and can do so through different types of termination (directly related to the cumulative incidence). Multinomial logit entails making several assumptions, including the independence of irrelevant alternatives (IIA), but Fortna (2015) in using the same method notes that Dow and Endersby (2004) explain that this is not a serious concern when the set of choices is stable. Subdistribution hazard requires other assumptions, including the proportional subhazards assumption. Dow and Endersby (2004) state that the multinomial logit is preferable without a large dataset, and the model makes more sense for the way that I think of this analysis (as essentially discrete data) (Jenkins 2005). Thus, following Fortna (2015), I triangulate between methods, modeling alternative methods as robustness checks (and the results of the analyses remain substantively similar).

Multinomial Logistic Regression Analysis Results

I show the full results of the multinomial logit models below (which are also summarized in the tables in the main text: Table 4.4 shows the results for one outcome only—peace agreement with electoral participation provisions, outcome="8" in the tables that follow—whereas Table A4.4 shows all of the outcomes). The analysis in Table A4.4 models time dependence using three terms, as discussed in the text, and then, following Dafoe (2013), the Table A4.4a presents the results with no time controls, and Table A4.4b presents the results with a logarithmic transformation of duration of conflict.

In this analysis, conflicts may also end in different outcomes—e.g. peace agreements without electoral participation provisions (outcome="1" in the tables that follow), victory by either side (outcome="4"), alliance (outcome="7"), or the conflict petering out (outcome="10")—and I show each as the baseline in Table A4.4c to demonstrate that different predictors are significant for termination through peace agreements with electoral participation provisions than termination through other outcomes.

**Table A.4.4: Conflict Termination through Electoral Participation Provisions
(Multinomial Logistic—Relative to Ongoing Conflict and Accounting for Other
Outcomes—Duration, Duration Squared, Duration Cubed Variables Included)**

VARIABLES	(1) Splines	(2) Splines	(3) Splines	(4) Splines	(5) Splines
Peace Agreements without EPPs (“1”)					
Cold War	-0.71* (0.37)		-0.85** (0.34)	-0.82** (0.38)	
Regional Election Observation	0.23 (0.46)			0.067 (0.46)	
Regional Democracy & Governance Assistance		-0.01 (0.02)			-0.02 (0.02)
Oil Production			-0.28 (0.39)	-0.28 (0.39)	-0.09 (0.41)
U.S. Military Aid			-0.44 (0.38)	-0.44 (0.38)	-0.42 (0.45)
Former British Colony			0.01 (0.43)	0.01 (0.44)	-0.48 (0.45)
Former French Colony			0.99** (0.50)	0.99** (0.50)	0.81* (0.49)
Conflict Duration	-0.17* (0.10)	-0.31*** (0.10)	-0.16* (0.10)	-0.16* (0.10)	-0.28*** (0.11)
Conflict Duration ²	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.012 (0.01)
Conflict Duration ³	-7.30e-05 (0.00)	-0.00 (0.00)	-6.90e-05 (0.00)	-6.98e-05 (0.00)	-0.00 (0.00)
Constant	-2.63*** (0.42)	-1.96*** (0.30)	-2.38*** (0.45)	-2.43*** (0.56)	-1.75*** (0.42)
Victories/Defeats (“4”)					
Cold War	0.01 (0.38)		0.19 (0.34)	-0.06 (0.38)	
Regional Election Observation	-0.58 (0.46)			-0.58 (0.43)	
Regional Democracy & Governance Assistance		0.01 (0.03)			0.02 (0.03)
Oil Production			-0.30 (0.28)	-0.31 (0.28)	-0.50 (0.34)
U.S. Military Aid			-0.13 (0.26)	-0.14 (0.27)	-0.25 (0.38)
Former British Colony			-0.13 (0.34)	-0.16 (0.34)	-0.66 (0.46)
Former French Colony			0.41 (0.29)	0.39 (0.29)	-0.46 (0.51)
Conflict Duration	-1.48*** (0.24)	-1.60*** (0.34)	-1.47*** (0.24)	-1.44*** (0.24)	-1.56*** (0.35)
Conflict Duration ²	0.13*** (0.03)	0.15*** (0.04)	0.13*** (0.03)	0.13*** (0.03)	0.15*** (0.04)
Conflict Duration ³	-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
Constant	-0.02 (0.40)	-0.42 (0.51)	-0.19 (0.47)	0.13 (0.46)	0.15 (0.54)

Alliances (“7”)

Cold War	1.44*		1.74***	1.47*	
	(0.85)		(0.54)	(0.86)	
Regional Election Observation	-0.94			-0.78	
	(1.14)			(1.17)	
Regional Democracy & Governance Assistance		0.08			0.08*
		(0.05)			(0.05)
Oil Production			-0.18	-0.18	-0.05
			(0.58)	(0.59)	(0.83)
U.S. Military Aid			-0.18	-0.11	0.27
			(0.58)	(0.60)	(0.86)
Former British Colony			0.69	0.65	1.08
			(0.64)	(0.63)	(0.83)
Former French Colony			0.76	0.71	-12.29***
			(0.69)	(0.65)	(1.18)
Conflict Duration	-0.78***	-2.01	-0.77***	-0.76***	-2.02
	(0.22)	(1.38)	(0.21)	(0.20)	(1.42)
Conflict Duration ²	0.07***	0.25	0.07***	0.07***	0.25
	(0.02)	(0.19)	(0.02)	(0.02)	(0.19)
Conflict Duration ³	-0.00***	-0.01	-0.00***	-0.00***	-0.01
	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)
Constant	-3.52***	-3.65**	-4.21***	-3.86***	-4.09
	(1.06)	(1.85)	(0.77)	(1.03)	(3.44)
Peace Agreements with EPPs (“8”)					
Cold War	-15.43***		-16.62***	-15.54***	
	(0.47)		(0.32)	(0.46)	
Regional Election Observation	2.45***			2.20***	
	(0.75)			(0.66)	
Regional Democracy & Governance Assistance		0.05*			0.07**
		(0.03)			(0.03)
Oil Production			-0.48	-0.44	-0.73*
			(0.44)	(0.40)	(0.38)
U.S. Military Aid			-1.09***	-1.12***	-1.39***
			(0.40)	(0.39)	(0.39)
Former British Colony			-1.22*	-1.16*	-1.16**
			(0.64)	(0.59)	(0.58)
Former French Colony			0.15	0.11	0.14
			(0.59)	(0.59)	(0.66)
Conflict Duration	0.09	0.04	0.10	0.12	0.07
	(0.13)	(0.14)	(0.14)	(0.14)	(0.15)
Conflict Duration ²	-0.01	-0.01	-0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Conflict Duration ³	9.10e-05	8.68e-05	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Constant	-5.27***	-3.77***	-2.53***	-4.15***	-2.69***
	(0.74)	(0.41)	(0.56)	(0.78)	(0.56)

No definitive end (likely
no or low fighting)
within eight years (“10”)

Cold War	-0.29 (0.34)		-0.24 (0.28)	-0.17 (0.31)	
Regional Election Observation	0.31 (0.43)			0.19 (0.39)	
Regional Democracy & Governance Assistance		0.07** (0.03)			0.08*** (0.03)
Oil Production			-0.86*** (0.27)	-0.84*** (0.27)	-1.03*** (0.31)
U.S. Military Aid			0.40 (0.26)	0.39 (0.27)	0.01 (0.41)
Former British Colony			0.23 (0.28)	0.24 (0.27)	0.06 (0.37)
Former French Colony			1.10*** (0.41)	1.11*** (0.42)	1.27*** (0.35)
Conflict Duration	1.09*** (0.12)	0.99*** (0.15)	1.16*** (0.14)	1.17*** (0.14)	1.10*** (0.18)
Conflict Duration ²	-0.05*** (0.01)	-0.047*** (0.01)	-0.05*** (0.01)	-0.05*** (0.01)	-0.05*** (0.01)
Conflict Duration ³	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)
Constant	-9.20*** (0.51)	-8.93*** (0.59)	-9.70*** (0.78)	-9.83*** (0.74)	-9.53*** (0.92)
Observations	2,655	1,498	2,632	2,632	1,488

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

**Table A4.4a: Conflict Termination through Electoral Participation Provisions
(Multinomial Logistic—Relative to Ongoing Conflict and Accounting for Other
Outcomes—No Duration Variables Included)**

VARIABLES	(1) None	(2) None	(3) None	(4) None	(5) None
Peace Agreements without EPPs (“1”)					
Cold War	-0.65* (0.38)		-0.83** (0.35)	-0.75** (0.38)	
Regional Election Observation	0.35 (0.49)			0.18 (0.48)	
Regional Democracy & Governance Assistance		-0.01 (0.03)			-0.02 (0.03)
Oil Production			-0.38 (0.43)	-0.37 (0.43)	-0.16 (0.48)
U.S. Military Aid			-0.38 (0.40)	-0.38 (0.40)	-0.41 (0.51)
Former British Colony			-0.01 (0.46)	-0.00 (0.47)	-0.55 (0.49)
Former French Colony			1.16** (0.55)	1.16** (0.55)	1.06* (0.56)
Constant	-3.48*** (0.32)	-3.09*** (0.27)	-3.11*** (0.43)	-3.22*** (0.55)	-2.80*** (0.46)
Victories/Defeats (“4”)					
Cold War	-0.11 (0.37)		0.12 (0.34)	-0.18 (0.36)	
Regional Election Observation	-0.66 (0.51)			-0.75 (0.49)	
Regional Democracy & Governance Assistance		0.00 (0.03)			0.01 (0.03)
Oil Production			-0.59* (0.33)	-0.63* (0.34)	-0.55 (0.36)
U.S. Military Aid			0.10 (0.28)	0.12 (0.28)	-0.20 (0.37)
Former British Colony			-0.14 (0.39)	-0.18 (0.39)	-0.84* (0.46)
Former French Colony			0.79** (0.35)	0.76** (0.36)	-0.05 (0.53)
Constant	-3.05*** (0.33)	-3.58*** (0.29)	-3.26*** (0.31)	-2.84*** (0.34)	-2.92*** (0.32)
Alliances (“7”)					
Cold War	1.22 (0.90)		1.65*** (0.52)	1.30 (0.89)	
Regional Election Observation	-1.06 (1.26)			-0.93 (1.25)	
Regional Democracy & Governance Assistance		0.08 (0.06)			0.09 (0.07)
Oil Production			-0.18 (0.60)	-0.18 (0.60)	0.01 (1.04)
U.S. Military Aid			-0.04 (0.61)	0.02 (0.62)	0.30 (0.89)
Former British Colony			0.73	0.68	1.20

			(0.63)	(0.63)	(1.12)
Former French Colony			0.79	0.73	-11.67***
			(0.66)	(0.62)	(1.23)
Constant	-4.96***	-6.53***	-5.83***	-5.36***	-7.42**
	(0.89)	(0.71)	(0.56)	(0.95)	(2.92)
Peace Agreements with EPPs (“8”)					
Cold War	-15.19***		-15.87***	-14.79***	
	(0.46)		(0.31)	(0.46)	
Regional Election Observation	2.51***			2.22***	
	(0.75)			(0.63)	
Regional Democracy & Governance Assistance		0.05*			0.08***
		(0.03)			(0.03)
Oil Production			-0.57	-0.51	-0.82**
			(0.46)	(0.39)	(0.38)
U.S. Military Aid			-1.08***	-1.12***	-1.42***
			(0.40)	(0.39)	(0.39)
Former British Colony			-1.20*	-1.15*	-1.16**
			(0.64)	(0.60)	(0.58)
Former French Colony			0.24	0.15	0.22
			(0.56)	(0.55)	(0.61)
Constant	-5.16***	-3.86***	-2.42***	-3.88***	-2.64***
	(0.59)	(0.36)	(0.41)	(0.52)	(0.40)
No definitive end (likely no or low fighting) within eight years (“10”)					
Cold War	-0.52*		-0.45	-0.51	
	(0.32)		(0.29)	(0.33)	
Regional Election Observation	-0.13			-0.14	
	(0.34)			(0.34)	
Regional Democracy & Governance Assistance		0.06***			0.07***
		(0.02)			(0.02)
Oil Production			-0.34	-0.35	-0.70**
			(0.22)	(0.23)	(0.31)
U.S. Military Aid			0.10	0.10	-0.13
			(0.19)	(0.19)	(0.31)
Former British Colony			0.19	0.18	0.18
			(0.28)	(0.28)	(0.38)
Former French Colony			0.33	0.32	0.35
			(0.28)	(0.28)	(0.37)
Constant	-3.06***	-3.65***	-3.13***	-3.04***	-3.33***
	(0.23)	(0.30)	(0.24)	(0.32)	(0.44)
Observations	2,655	1,498	2,632	2,632	1,488

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

**Table A4.4b: Conflict Termination through Electoral Participation Provisions
(Multinomial Logistic—Relative to Ongoing Conflict and Accounting for Other
Outcomes—Logged Duration Variable Included)**

VARIABLES	(1) Logged	(2) Logged	(3) Logged	(4) Logged	(5) Logged
Peace Agreements without EPPs (“1”)					
Cold War	-0.69* (0.38)		-0.84** (0.35)	-0.79** (0.38)	
Regional Election Observation	0.27 (0.46)			0.11 (0.47)	
Regional Democracy & Governance Assistance		-0.01 (0.02)			-0.02 (0.02)
Oil Production			-0.30 (0.40)	-0.30 (0.40)	-0.09 (0.42)
U.S. Military Aid			-0.43 (0.38)	-0.43 (0.38)	-0.43 (0.46)
Former British Colony			0.01 (0.44)	0.01 (0.45)	-0.49 (0.46)
Former French Colony			1.03** (0.51)	1.03** (0.51)	0.86* (0.50)
Conflict Duration (Logged)	-0.41*** (0.13)	-0.56*** (0.14)	-0.35*** (0.13)	-0.35*** (0.13)	-0.50*** (0.14)
Constant	-2.80*** (0.35)	-2.27*** (0.28)	-2.56*** (0.42)	-2.64*** (0.53)	-2.06*** (0.43)
Victories/Defeats (“4”)					
Cold War	-0.028 (0.40)		0.16 (0.35)	-0.10 (0.40)	
Regional Election Observation	-0.60 (0.47)			-0.61 (0.43)	
Regional Democracy & Governance Assistance		0.01 (0.03)			0.02 (0.03)
Oil Production			-0.29 (0.28)	-0.29 (0.28)	-0.50 (0.34)
U.S. Military Aid			-0.13 (0.26)	-0.14 (0.26)	-0.26 (0.37)
Former British Colony			-0.13 (0.34)	-0.17 (0.34)	-0.67 (0.46)
Former French Colony			0.40 (0.29)	0.38 (0.29)	-0.48 (0.51)
Conflict Duration (Logged)	-1.72*** (0.19)	-1.52*** (0.30)	-1.67*** (0.19)	-1.66*** (0.20)	-1.49*** (0.29)
Constant	-1.36*** (0.31)	-1.94*** (0.30)	-1.53*** (0.32)	-1.18*** (0.34)	-1.31*** (0.35)

Alliances (“7”)

Cold War	1.21 (0.93)		1.65*** (0.53)	1.32 (0.92)	
Regional Election Observation	-1.01 (1.24)			-0.87 (1.24)	
Regional Democracy & Governance Assistance		0.08 (0.06)			0.09 (0.07)
Oil Production			-0.01 (0.51)	-0.02 (0.52)	0.04 (0.97)
U.S. Military Aid			-0.08 (0.60)	-0.03 (0.60)	0.28 (0.94)
Former British Colony			0.73 (0.61)	0.68 (0.60)	1.23 (1.08)
Former French Colony			0.70 (0.66)	0.65 (0.62)	-13.10*** (1.41)
Conflict Duration (Logged)	-0.34 (0.32)	-0.20 (0.71)	-0.34 (0.29)	-0.33 (0.28)	-0.33 (0.65)
Constant	-4.43*** (1.10)	-6.19*** (1.64)	-5.36*** (0.75)	-4.91*** (1.15)	-6.90* (3.70)
Peace Agreements with EPPs (“8”)					
Cold War	-15.76*** (0.46)		-16.18*** (0.31)	-15.10*** (0.46)	
Regional Election Observation	2.48*** (0.75)			2.23*** (0.65)	
Regional Democracy & Governance Assistance		0.05* (0.03)			0.07*** (0.03)
Oil Production			-0.56 (0.45)	-0.50 (0.39)	-0.81** (0.37)
U.S. Military Aid			-1.08*** (0.39)	-1.12*** (0.39)	-1.41*** (0.38)
Former British Colony			-1.19* (0.63)	-1.15* (0.60)	-1.14** (0.57)
Former French Colony			0.20 (0.58)	0.15 (0.59)	0.18 (0.65)
Conflict Duration (Logged)	-0.06 (0.17)	-0.19 (0.17)	-0.09 (0.17)	0.01 (0.19)	-0.10 (0.21)
Constant	-5.04*** (0.67)	-3.55*** (0.34)	-2.27*** (0.47)	-3.90*** (0.68)	-2.48*** (0.47)

No definitive end (likely
no or low fighting)
within eight years (“10”)

Cold War	-0.28 (0.33)		-0.22 (0.26)	-0.25 (0.30)	
Regional Election Observation	0.08 (0.42)			-0.09 (0.37)	
Regional Democracy & Governance Assistance		0.07** (0.03)			0.07** (0.03)
Oil Production			-0.99*** (0.27)	-1.00*** (0.27)	-1.18*** (0.32)
U.S. Military Aid			0.34* (0.21)	0.35* (0.22)	-0.04 (0.30)
Former British Colony			0.20 (0.21)	0.20 (0.20)	0.21 (0.30)
Former French Colony			1.01*** (0.36)	1.00*** (0.37)	1.25*** (0.32)
Conflict Duration (Logged)	1.23*** (0.19)	1.14*** (0.15)	1.59*** (0.31)	1.59*** (0.30)	1.56*** (0.29)
Constant	-5.91*** (0.57)	-6.18*** (0.47)	-6.59*** (0.74)	-6.55*** (0.77)	-6.79*** (0.77)
Observations	2,655	1,498	2,632	2,632	1,488

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

**Table A4.4c: Conflict Termination through Electoral Participation Provisions
(Multinomial Logistic—Relative to Ongoing Conflict and Accounting for Other
Outcomes—All Different Outcomes Used as the Baseline)**

VARIABLES	BASE IS: Non-terminated Conflicts (“0”)	BASE IS: Peace Agreements without EPPs (“1”)	BASE IS: Victories/Defeats (“4”)	BASE IS: Alliances (“7”)	BASE IS: No definitive end (likely no or low fighting) within eight years (“10”)
Cold War	-15.54*** (0.46)	-14.72*** (0.46)	-15.48*** (0.46)	-17.00*** (0.97)	-15.37*** (0.52)
Regional Election Observation	2.20*** (0.66)	2.13*** (0.74)	2.78*** (0.77)	2.98** (1.41)	2.01*** (0.71)
Oil Production	-0.44 (0.40)	-0.17 (0.44)	-0.14 (0.49)	-0.26 (0.65)	0.40 (0.55)
U.S. Military Aid	-1.12*** (0.39)	-0.68 (0.49)	-0.98* (0.51)	-1.01 (0.69)	-1.51*** (0.51)
Former British Colony	-1.16* (0.59)	-1.17** (0.57)	-1.00 (0.70)	-1.81** (0.86)	-1.40* (0.76)
Former French Colony	0.11 (0.59)	-0.87 (0.65)	-0.28 (0.60)	-0.59 (0.88)	-1.00 (0.87)
Conflict Duration	0.12 (0.14)	0.28 (0.18)	1.56*** (0.25)	0.88*** (0.24)	-1.05*** (0.20)
Conflict Duration ²	-0.01 (0.01)	-0.01 (0.01)	-0.14*** (0.03)	-0.08*** (0.02)	0.044*** (0.01)
Conflict Duration ³	0.00 (0.00)	0.00 (0.00)	0.00*** (0.00)	0.00*** (0.00)	-0.00*** (0.00)
Constant	-4.15*** (0.78)	-1.72** (0.83)	-4.28*** (0.87)	-0.29 (1.28)	5.68*** (1.06)
Observations	2,632	2,632	2,632	2,632	2,632

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Additional Tables Showing the Results of the Controls (Conflict Data)

The following tables show the results considering the standards control variables in the conflict data that I discuss in the chapter's text. This table, along with Table A.4.3, form the basis for the summary Table 4.5 in the main text. (Additional control variables run in robustness checks are described in the codebook.)

**Table A.4.5: Conflict Termination through Electoral Participation Provisions
(Multinomial Logistic)—Controls**

Outcome of Termination through Electoral Participation Provisions (8) Only Shown Here							
VARIABLES	<i>Duration & Deaths</i>	<i>Gov't Capacity 1</i>	<i>Gov't Capacity 2</i>	<i>Regime Type 1</i>	<i>Regime Type 2</i>	<i>Regime Type 3</i>	<i>Governance Quality</i>
Cold War	-15.37*** (0.46)	-15.18*** (0.47)	-15.71*** (0.49)	-16.11*** (0.50)	-15.39*** (0.46)	-15.35*** (0.43)	-14.11*** (0.54)
Regional Election Observation	2.28*** (0.61)	2.43*** (0.64)	1.34** (0.58)	1.59** (0.67)	2.25*** (0.67)	2.27*** (0.66)	2.15** (0.94)
Oil Production	0.02 (0.42)	-0.15 (0.41)	-0.18 (0.47)	-0.26 (0.40)	-0.51 (0.42)	-0.36 (0.41)	-0.78 (0.70)
U.S. Military Aid	-1.04*** (0.38)	-1.10*** (0.38)	-0.97** (0.43)	-1.47*** (0.38)	-1.12*** (0.39)	-1.10*** (0.38)	-1.24*** (0.41)
Former British Colony	-0.82 (0.51)	-0.90* (0.51)	-1.02** (0.51)	-0.68 (0.52)	-0.89 (0.57)	-0.98* (0.54)	-1.40** (0.66)
Former French Colony	0.18 (0.53)	0.44 (0.51)	-0.05 (0.74)	0.02 (0.54)	-0.08 (0.61)	-0.02 (0.58)	-2.04 (1.33)
Conflict Duration	0.18 (0.15)	0.20 (0.16)	0.18 (0.17)	0.19 (0.14)	0.18 (0.15)	0.17 (0.15)	0.02 (0.21)
Conflict Duration (Squared)	-0.02 (0.01)	-0.02 (0.01)	-0.01 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.00 (0.01)
Conflict Duration (Cubed)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Major Conflict Indicator (Based on Battle Deaths)	0.95 (0.60)	-0.00 (0.03)	0.05 (0.03)				
Population	-0.01 (0.01)						
Balance between Group and Government Capacity		-0.58** (0.27)					
Government Military Personnel			-0.54*** (0.15)				
Militant Group Fighters			0.31** (0.15)				
Real GDP per 1000 Inhabitants	-0.02 (0.03)	0.75 (0.53)	0.09 (0.57)	-0.01 (0.03)	-0.01 (0.03)	-0.02 (0.03)	
Regime Type				0.54** (0.27)			
Democracy Level				0.14** (0.06)			
Ever Democracy					-0.30 (0.41)		
Change in Democracy in Last 5 Years						-0.15 (0.39)	
Corruption							-0.01 (0.25)
Bureaucratic Quality							0.25 (0.32)
Law and Order							-0.44*** (0.14)
Constant	-5.05*** (0.92)	-4.60*** (0.89)	-4.68** (1.87)		-3.92*** (0.84)	-4.15*** (0.81)	-2.41* (1.30)
<i>N</i>	2,336	2,274	1,867		2,321	2,321	1,571

See Table 5 notes. Numbers in parentheses are robust standard errors. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Table A.4.5: Conflict Termination through Electoral Participation Provisions (Multinomial Logistic)—Controls (Cont.)

Outcome of Termination through Electoral Participation Provisions (8) Only Shown Here					
VARIABLES	<i>Agreement</i>				
	<i>Stakes</i>	<i>Difficulty</i>	<i>Int'l Ties 1</i>	<i>Int'l Ties 2</i>	<i>Int'l Ties 3</i>
Cold War	-14.51*** (0.63)	-15.41*** (0.46)	-14.27*** (0.50)	-15.42*** (0.47)	-15.89*** (0.54)
Regional Election Observation	2.43*** (0.69)	1.93*** (0.74)	1.95*** (0.69)	2.16*** (0.66)	2.10*** (0.77)
Oil Industry	-0.26 (0.42)	-0.84* (0.49)	-0.63* (0.35)	-0.61* (0.37)	-0.26 (0.46)
U.S. Military Aid	-1.12*** (0.36)	-1.08*** (0.37)	-0.92** (0.40)	-1.03*** (0.38)	-1.37*** (0.39)
Former British Colony	-1.53*** (0.52)	-1.06* (0.55)	-1.09** (0.54)	-1.31** (0.57)	-0.83 (0.52)
Former French Colony	0.00 (0.51)	0.10 (0.58)	0.39 (0.58)	-0.12 (0.63)	0.02 (0.67)
Conflict Duration	0.17 (0.16)	0.16 (0.14)	0.19 (0.16)	0.09 (0.15)	0.11 (0.15)
Conflict Duration (Squared Term)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	0.01 (0.01)	-0.01 (0.01)
Conflict Duration (Cubed Term)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Territorial Conflict	-1.14 (1.53)				
Identity Conflict	0.87** (0.42)				
Marxist Conflict	0.33 (0.49)				
Militant Group with Total Goals	0.82 (1.57)				
Past Agreements		1.03*** (0.26)			
Factions Fighting		-0.02 (0.09)			
U.N. Peacekeeping Mission			1.48*** (0.47)		
Regional Democracy Level				-0.05 (0.77)	
Post-9/11				0.70 (0.43)	
Aid as a Share of GDP					7.80** (3.05)
Trade as Share of GDP					0.00 (0.01)
Member of GATT or WTO					0.22 (0.47)
Constant	-5.44** (2.19)	-4.30*** (0.97)	-4.69*** (0.89)	-3.99*** (0.85)	-4.69*** (0.96)
<i>N</i>	2,255	2,632	2,632	2,580	2,286

See Table 5 notes. Numbers in parentheses are robust standard errors. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Chapter 6 Appendix
—
Consequences

Table A.6.1: Summary Statistics

	Mean	Stan. Dev.	Observations
Failure of Peace in the Government-Rebel Group Dyad (within 5 years)(=1)	0.43	0.50	110
<i>Independent Variables of Interest</i>			
Electoral Participation Provisions(=1) ^{a,b}	0.38	0.49	110
Implemented Electoral Participation(=1) ^{a,b}	0.25	0.44	110
Cold War(=1)	0.13	0.33	110
Regional Election Observation (Percent, Lagged)(=0-1)	0.60	0.31	110
Regional Dem. Assist. (Percent of Development Aid, Lagged 2yr.)(=0.01-0.19) ^c	0.08	0.06	96
<i>Other Provisions^d</i>			
DDR Provisions(=1)	0.51	0.50	110
SSR Provisions(=1)	0.49	0.50	110
Government Power-Sharing Provisions(=1)	0.17	0.38	110
Civil Service Power-Sharing Provisions(=1)	0.12	0.32	110
<i>Control Variables</i>			
Major Conflict Indicator(=1)	0.75	0.44	110
Conflict Duration (Dyadic)(=0-38)	7.35	7.77	110
Real GDP per 1,000 (Lagged)(=0.20-27.02)	2.51	4.40	110
Balance between Group and Government(=0-2) ^e	1.02	0.64	108
Government's Military Personnel (1000s, Logged, Lagged)(=0-7.14)	3.55	1.38	107
Rebel Group's Fighters(Logged, During Conflict)(=5.30-11.04)	8.76	1.45	83
Past Agreement(s)(=0-3)	0.34	0.62	110
Number of Active Factions Not Signing(=0-9)	1.47	2.14	110
Number Signing(=1-3)	1.43	0.78	110
More Negotiations Stipulated in Agreement(=1)	0.15	0.36	110
Territorial Conflict(=1)	0.31	0.46	110
Identity Conflict(=1)	0.83	0.38	109
Marxist Conflict(=1)	0.17	0.38	110
Rebel Groups with Total Goals(=1)	0.74	0.44	109
Post-9/11(=1)	0.20	0.40	110
U.N. Peacekeeping Mission(Present Prior to Agreement)(=1)	0.19	0.39	110
Past U.N. Peacekeeping Mission(=1)	0.25	0.44	110
Enforcement U.N. Peacekeeping Mission(=1)	0.15	0.35	110
Regional Democracy Level (Lagged)(=0.07-0.88)	0.32	0.22	110
Aid as a Share of GDP (Lagged)(=0-0.26)	0.05	0.05	108
Trade as a Share of GDP (Lagged)(=1.62-197.93)	53.77	33.26	110
Democracy (Lagged)(=-9-10)	0.41	5.00	110
Population (Lagged)(=0.53-870.11)	43.72	139.14	110
Oil Production Indicator (Lagged)(=1)	0.45	0.50	110
Corruption (Lagged)(=0-5)	2.33	1.07	69
Bureaucratic Quality (Lagged)(=0-4)	1.81	1.28	69
Law and Order (Lagged)(=0-6)	2.23	1.19	69

Note: 110 dyadic peace agreements (without peaceful renegotiations and with nine emerging from settlements with multiple signatories) between 81 dyads in 49 civil conflicts in 43 states.

Alternative variables, listed in footnote prior to this table, are described in the supporting information.

a: Units are peace agreements; dependent variable is conflict recurrence.

b: The distinction is between those peace agreements that include provisions to hold elections and allow both sides to participate as political parties versus those that do not, not implementation (also shown though).

c: This variable is not coded prior to 1990. For 1989, the closest value (1989-1990) is used; earlier cases drop.

d: All the other power-sharing provisions coded in the UCDP Peace Agreement Dataset are also considered.

e: Coded at group-level from parity (0) to "much" stronger (2). Three groups are not perfect matches by name.

Additional Tables Showing the Results of the Controls

The following tables show the results considering the standards control variables that I discuss in the chapter's text. Additional control variables are described in the codebook.

Table A.6.2: Effect of Participation Provisions on Conflict Recurrence—Controls

	<i>(More Conflict & Capacity)</i>	<i>(More Conflict & Capacity)</i>	<i>(More Conflict & Capacity)</i>	<i>(More Conflict & Capacity)</i>	<i>(More Int'l Ties)</i>	<i>(More Int'l Ties)</i>	<i>(More Int'l Ties)</i>
Participation Provisions	-2.04*** (0.61)	-2.11*** (0.60)	-1.92*** (0.55)	-1.64*** (0.57)	-1.57*** (0.57)	-1.58*** (0.57)	-1.37** (0.56)
Duration of the Dyad's Conflict	0.019 (0.03)		0.04 (0.04)				
Total Battle Deaths (Logged, Best Estimate)	0.28** (0.13)	0.35*** (0.12)	0.16 (0.15)				
Real GDP per capita (1,000's, Lagged)	0.04 (0.05)	0.09 (0.05)	0.04 (0.06)				
Population	-0.00* (0.00)						
Duration of the Conflict		-0.02 (0.02)					
Balance between Group and Government Capacity		-0.43 (0.44)					
Government Military Personnel			-0.25 (0.23)				
Militant Group Fighters			0.33 (0.23)				
Past Agreement				0.18 (0.32)			
Factions Fighting				0.14 (0.09)			
Aid as a Share of GDP					-1.21 (5.00)		
Trade as Share of GDP					0.01 (0.01)		
Member of GATT or WTO					-0.11 (0.51)		
Past U.N. Mission						0.21 (0.50)	
Enforcement U.N. Mission							-1.51** (0.72)
Constant	-2.55* (1.45)	-2.57** (1.30)	-3.46 (2.35)	-0.18 (0.39)	0.09 (0.55)	0.20 (0.30)	0.34 (0.30)
Observations	110	108	81	109	108	110	110
Log pseudolikelihood	-64.11	-61.77	-48.05	-66.17	-66.64	-68.39	-66.30
Pseudo R-squared	0.15	0.17	0.14	0.11	0.10	0.09	0.12

Note: Method is logistic regression analysis. DV is conflict recurrence by government-rebel group dyad within 5 years (binary). Numbers in parentheses are robust standard errors, clustered by state (maximum=43). Number of observations varies, aside from control missingness, because region/time-period/interaction perfectly predicts success/failure (five regions and three time-periods). *** p<0.01, ** p<0.05, * p<0.1

Table A.6.2: Effect of Participation Provisions on Conflict Recurrence—Controls

(Cont.)

	<i>(More Int'l Ties)</i>	<i>(More Regime Type)</i>	<i>(More Regime Type)</i>	<i>(More Regime Type)</i>	<i>(More Governance Quality)</i>	<i>(More Governance Quality)</i>
Participation Provisions	-2.13*** (0.76)	-1.57*** (0.56)	-1.79*** (0.58)	-1.86*** (0.57)	-1.52*** (0.57)	-2.14*** (0.72)
Real GDP per capita (1,000's, Lagged)		0.03 (0.06)	0.069 (0.05)	0.03 (0.05)	0.00 (0.06)	
Troops per 1000	-0.05 (0.05)					
Regime Variable (Most to Least Inclusive, Lagged)		0.23 (0.30)				
Indicator of Democracy (Lagged)		0.54 (0.85)				
Indicator of Past Democracy (Any time from 1945 to date)			-1.43*** (0.51)			
Indicator of Change in Regime Type (Compared to 5 Years Ago)				-1.39** (0.57)		
Oil Production Indicator (Lagged)					0.48 (0.47)	
Corruption (Lagged)						0.28 (0.33)
Bureaucratic Quality (Lagged)						0.10 (0.32)
Law and Order (Lagged)						-0.33 (0.30)
Constant	0.60 (0.51)	-0.62 (1.18)	0.92** (0.38)	0.27 (0.32)	-0.00 (0.36)	0.45 (0.76)
Observations	51	110	110	110	110	69
Log pseudolikelihood	-28.42	-68.11	-63.36	-65.81	-67.76	-40.34
Pseudo R-squared	0.18	0.09	0.16	0.12	0.10	0.15

Note: Method is logistic regression analysis. DV is conflict recurrence by government-rebel group dyad within 5 years (binary). Numbers in parentheses are robust standard errors, clustered by state (maximum=43). Number of observations varies, aside from control missingness, because region/time-period/interaction perfectly predicts success/failure (five regions and three time-periods). *** p<0.01, ** p<0.05, * p<0.1

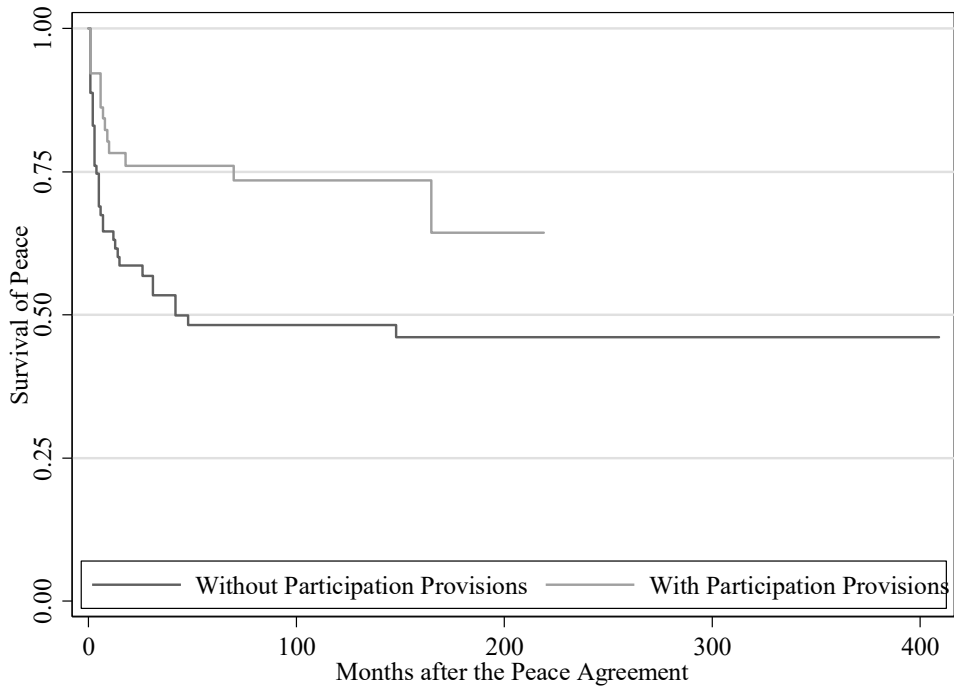
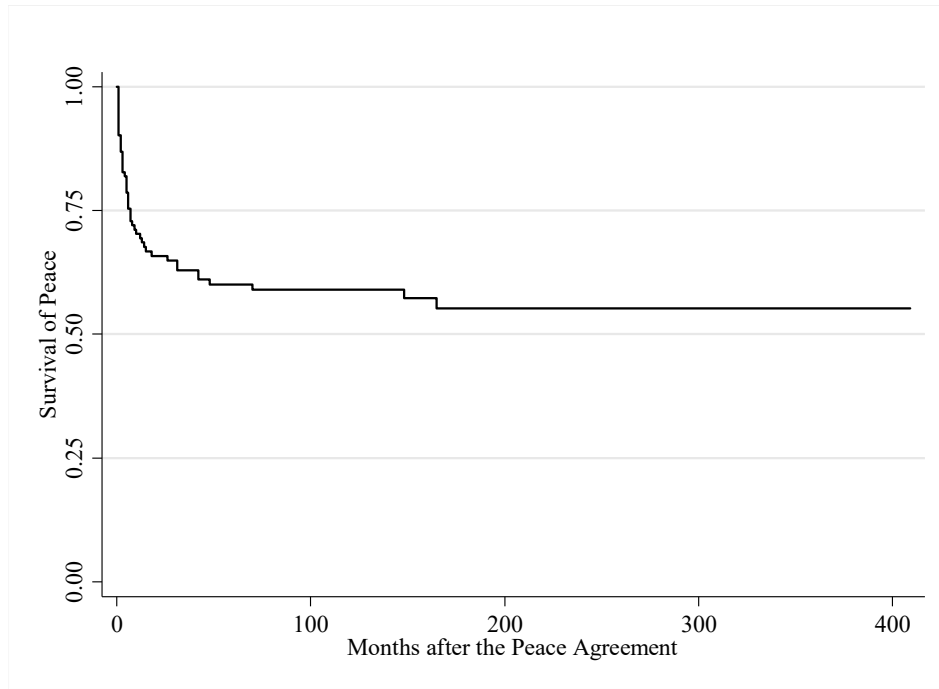
Using Duration Models in Place of Logistic Regression Analysis

Many studies modeling post-conflict peace use duration models in place of logistic regression analysis. There is additional variation to explore using these analyses—*how long* peace lasts, in addition to whether it fails in a set amount of time—and much of this work is interested in how post-conflict processes such as economic growth or foreign aid provided after the fighting affect peace. The logistic regression analysis in some ways makes more sense for the question that this article posits about settlement design and peace, but, nonetheless, I also show duration models in this appendix for general interest and for comparison with those studies.

Non-parametric estimations: the Kaplan-Meier estimator

I first estimate the basic non-parametric survival function (measuring duration through 2010); I then estimate this with the electoral participation provisions variable. These are the simplest estimations of the duration effects (and the second one is also shown in the text of the article).

Figure A.6.1: Survival Estimates



Note: The upper graph shows the unconditional probability that a peace agreement survives beyond time t . The lower graph shows the same analysis by electoral participation provisions (also shown in the article).

Semi-parametric models: Cox model

Most of the studies that use duration models to examine post-conflict peace rely on a type of semi-parametric model, the Cox model. This section presents the results of the estimated models using the Efron methods (and other methods, such as the Exact Discrete Partial Likelihood, produce very similar results). Since more than one peace agreement fails per month, all estimated Cox models assume “tied observations” (see figure below). All estimations report coefficients and, thus, are not exponentiated, so, like the logit models, these effects can be read as negative or positive based on the signs in the table (negative effects are expected on electoral participation provisions).

Figure A.6.2: Distribution of Duration of Peace across Agreements

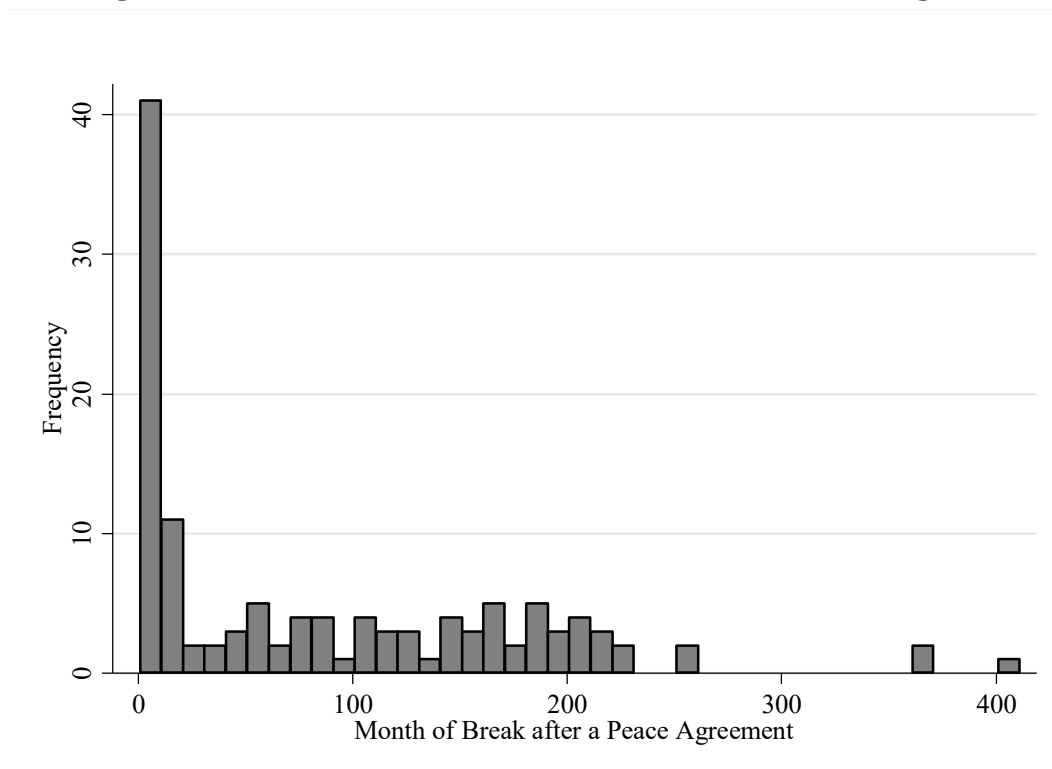


Table A.6.3: Effect on Conflict Recurrence (Cox Model)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Participation Provisions	-0.79** (0.40)	-0.61* (0.36)	-1.04** (0.41)	-0.81** (0.40)	-1.04*** (0.39)	-0.66* (0.38)	-1.39*** (0.51)
DDR Provisions		-0.53 (0.38)					-1.20** (0.54)
SSR Provisions		0.03 (0.40)					-0.27 (0.47)
Government Power-Sharing Provisions		-0.24 (0.48)					
Civil Service Power-Sharing Provisions		0.10 (0.36)					
Major War			0.78 (0.52)				1.09* (0.56)
Duration of the Dyad's Conflict			0.03 (0.02)				0.02 (0.02)
Real GDP per capita (1,000's, Lagged)			0.01 (0.03)				0.48*** (0.14)
Balance between Group and Government			-0.35 (0.28)				
Past Agreement(s)				0.07 (0.15)			
Number of Active Factions Not Signing				0.01 (0.08)			
Number of Factions Signing				0.35** (0.14)			0.44** (0.22)
More Negotiations Stipulated in Agreement				0.97** (0.38)			1.41*** (0.49)
Territorial Conflict					0.24 (0.46)		-0.34 (0.41)
Identity Conflict					-0.30 (0.37)		
Marxist Conflict					0.11 (0.42)		
Rebel Groups with Total Goals					1.08* (0.56)		0.55 (0.49)
Cold War						-0.44 (0.57)	
Post-9/11						0.06 (0.49)	
U.N. Peacekeeping Mission (Present)						0.27 (0.46)	1.19** (0.52)
Regional Election Observation (% , Lagged)						-1.04* (0.58)	
Regional Democracy Level (Lagged)						-0.95 (1.19)	0.58 (2.96)
Level of Democracy (Lagged)							
Population (1000's, Lagged)							0.00 (0.00)
Region, Decade, Interaction							IN
Number of Observations	122	122	120	122	120	122	121
Log Pseudo Likelihood	-221.3	-219.4	-214.2	-215.8	-211.4	-218.5	-188.5

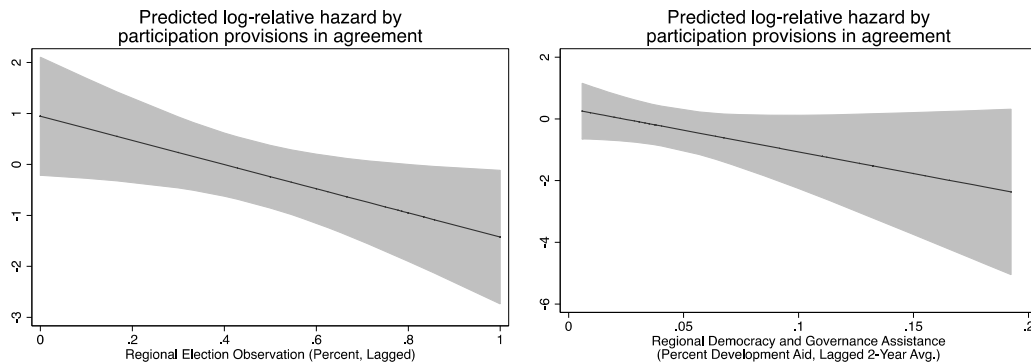
Note: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table A.6.4: Conditional Effect on Conflict Recurrence (Cox Model)

	Model 8	Model 9	Model 10	Model 11
Participation Provisions	0.95 (0.59)	1.03 (0.73)	0.33 (0.50)	0.07 (0.52)
Regional Election Observation (Percent, Lagged)	-0.47 (0.45)	-0.28 (0.77)		
Part. Provisions*Reg. Election Observation (Interaction of Interest)	-2.37** (1.10)	-2.63** (1.24)		
Regional Democracy and Governance Assistance/ Development Aid (Lagged Two Year Average)			4.46 (3.89)	8.44 (5.56)
Part. Provisions*Reg. Dem. and Gov. Assistance (Interaction of Interest)			-14.04 (8.85)	-12.33 (7.99)
Region, Decade, Interaction		IN		IN
Observations	122	122	107	107
Log pseudolikelihood	-217.8	-210.6	-173.8	-166.1

Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Figure A.6.3: Predicted Conflict Recurrence (Cox Model)



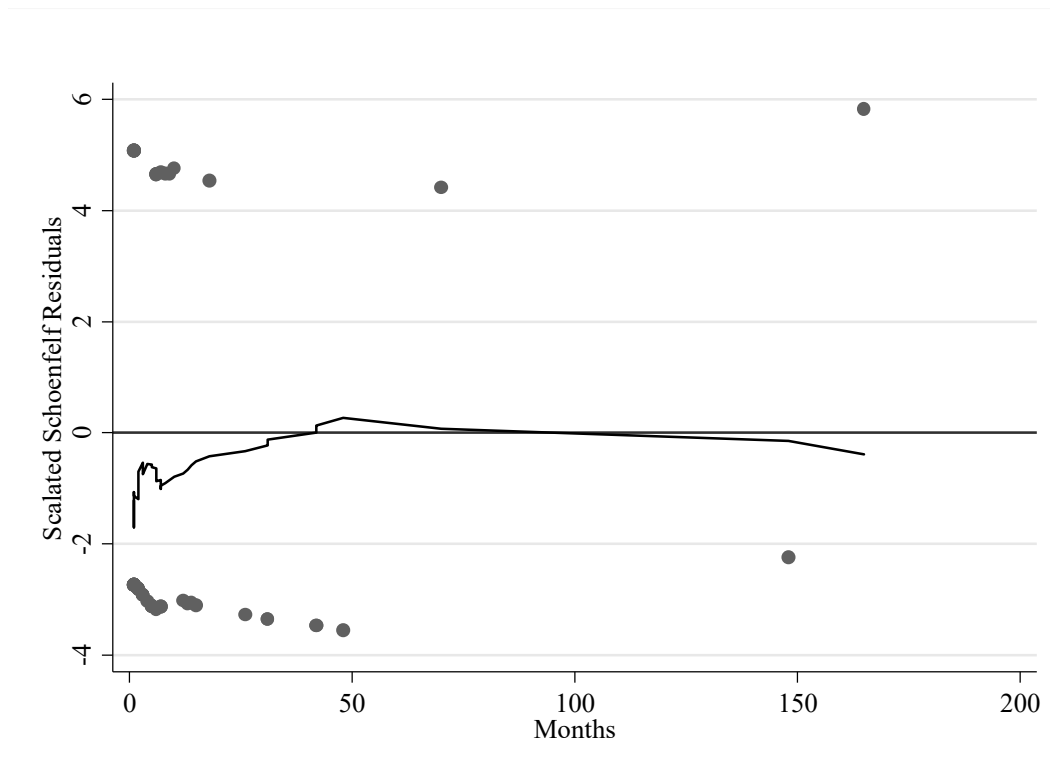
Note:

Left graph corresponds to the estimation of model 10, whereas right graph corresponds to model 12.

Testing the proportionality assumption

Like all models, the Cox model has assumptions that underpin it, including the proportionality assumption. There are a number of tests for non-proportionality.³ One such test is on the Schoenfeld Residuals. The idea is that if the residual is random, then the evidence does not suggest systematic dependence with time. I conducted the non-proportionality test using the basic specification, where the covariate is electoral participation provisions. Examination of the figure below suggests that the PH assumption holds, as the slope with respect to time is basically at zero. The table below shows a slightly more sophisticated test of the same. Both the visual and statistical tests suggest that the proportional hazards assumption holds for the basic specification. This lends confidence to the estimated Cox models in the previous sections.

Figure A.6.4: Test of PH Assumptions



Note: This is a plot of scaled Schoenfeld Residuals against time and scatter of electoral participation provisions in peace agreements.

Table A.6.5: PH Assumption Test, Based on Schoenfeld Residuals

Time: Time				
propartNC	0.13790	1.52	1	0.2184
global test		1.52	1	0.2184

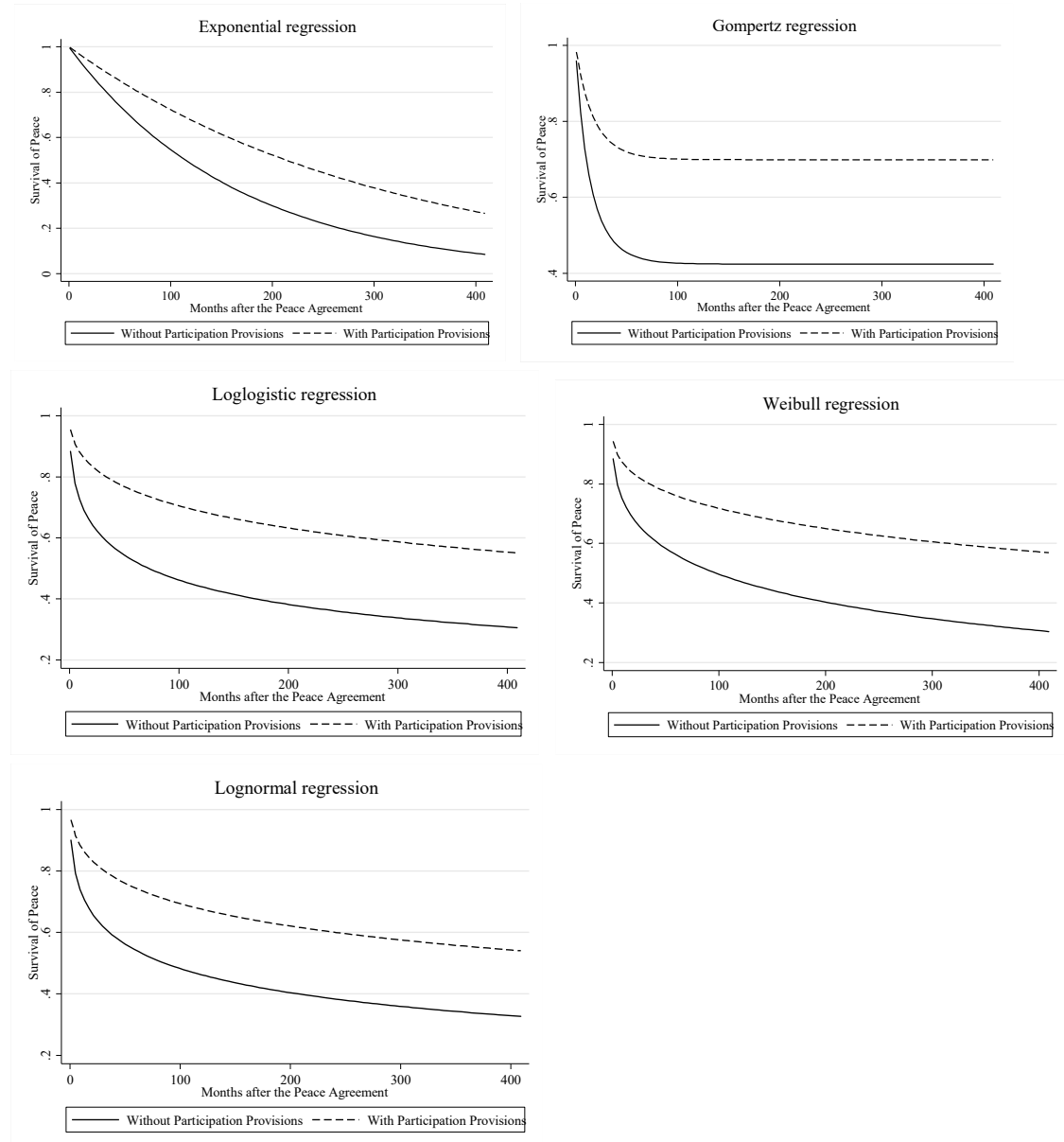
Note: Robust variance-covariance matrix used; null hypothesis is that the PH assumption holds.

³ On these models, in general, as well as this specific point, see Janet M. Box-Steffensmeier and Christopher J.W. Zorn. 2001. "Duration Models and Proportional Hazards in Political Science." *American Journal of Political Science* 45(4): 972–988.

Parametric models

There are other methods for estimating duration models. Parametric models assume the “shape” of how the hazard is affected by time. According to theoretical or modeled expectations about what the time dependency will look like, I can also use the following parametric models: Exponential, Weibull, Lognormal, Log-Logistic, Gompertz, or Generalized Gamma. I present the estimation of the baseline equation with only one covariate (*propart*) in the figures below to examine the shapes. Notice that there is no estimation for the generalized gamma distribution, because the maximum likelihood estimation does not converge for this specification.

Figure A6.5: Parametric Estimation of Hazard Function for Peace Agreement



Note: The graphs correspond to the estimation of parametric hazard functions for peace agreement survival including participation provisions as unique covariate. These correspond to the estimation of the models using the distributions named at the top of each figure.

I do not have a strong theoretical prediction about the model with the best fit, so, in order to choose a model, I use the Akaike’s Information Criterion to identify which estimation has the lowest log-likelihood. Given that both Gompertz and log-normal have similar AIC criterion scores—and the lowest from among these specifications—I chose the log-normal given that this distributional form implies that risk first rises with time and then fall, whereas the Gompertz assumes a monotone hazard rate that exponentially increases or decreases with time (so from even a weak theoretical standpoint, it is reasonable to think that the lognormal fits best). It also provides ease of interpretation.

Table A.6.6: Comparison of parametric models for peace agreement survival

Model	N	LogLikelihood_NULL	Loglikelihood_model	df	AIC	BIC
<i>Exponential</i>	122	-231.5064545	-229.3994293	2	462.7988586	468.4068909
<i>Gompertz</i>	122	-179.4204865	-175.1685181	3	356.3370361	364.7490845
<i>Loglogistic</i>	122	-182.0186768	-178.3483124	3	362.6966248	371.1086731
<i>Weibull</i>	122	-185.0113373	-181.9229126	3	369.8458252	378.2578735
<i>Lognormal</i>	122	-178.8677673	-175.6760559	3	357.3521118	365.7641602

I therefore estimate the remaining models using the log-normal distribution. An important note here on interpretation is that this model captures the survival time (“*peace survival*”), rather than the time until failure (through conflict recurrence). This is the opposite of the effect in the Cox and logit models. Thus, the external engagement theory implies that we should see a positive effect of electoral participation provisions (as it should prolong peace survival).

Table A.6.7: Effect on Conflict Recurrence (Parametric Models)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Participation Provisions	1.91** (0.97)	1.24 (0.91)	2.21** (0.93)	1.73* (0.93)	2.58*** (0.95)	1.82** (0.89)	2.65** (1.03)
DDR Provisions		1.48 (1.04)					1.93** (0.86)
SSR Provisions		-0.12 (0.97)					1.14 (1.09)
Government Power-Sharing Provisions		0.37 (1.24)					
Civil Service Power-Sharing Provisions		-0.02 (0.99)					
Major War			-1.55 (1.29)				-2.03* (1.04)
Duration of the Dyad's Conflict			-0.05 (0.05)				-0.01 (0.04)
Real GDP per capita (1,000's, Lagged)			-0.00 (0.08)				-1.10*** (0.33)
Balance between Group and Government			0.73 (0.68)				
Past Agreement(s)				-0.07 (0.39)			
Number of Active Factions Not Signing				-0.10 (0.18)			
Number of Factions Signing				-0.70** (0.33)			-0.66 (0.41)
More Negotiations Stipulated in Agreement				-2.21*** (0.85)			-2.11* (1.09)
Territorial Conflict					-0.38 (1.11)		0.62 (1.14)
Identity Conflict					0.96 (0.83)		
Marxist Conflict					0.35 (0.89)		
Rebel Groups with Total Goals					-2.60** (1.25)		-1.71 (1.37)
Cold War						1.55 (1.59)	
Post-9/11						-0.46 (1.05)	
U.N. Peacekeeping Mission (Present)						-0.81 (1.00)	-2.53** (1.07)
Regional Election Observation (% , Lagged)						3.11* (1.61)	
Regional Democracy Level (Lagged)						2.51 (2.69)	-3.54 (6.35)
Level of Democracy (Lagged)							
Population (1000's, Lagged)							0.00 (0.00)
Region, Decade, Interaction							IN
Observations	122	122	120	122	120	122	121
Log pseudolikelihood	-175.68	-173.83	-169.24	-171.16	-167.59	-172.41	-144.68
Sigma	3.47	3.38	3.23	3.29	3.31	3.36	2.55

Note: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. Models based on lognormal distribution.
Reminder that the DV is now "peace survival," rather than "conflict failure" (in Cox), so the opposite effect is expected.

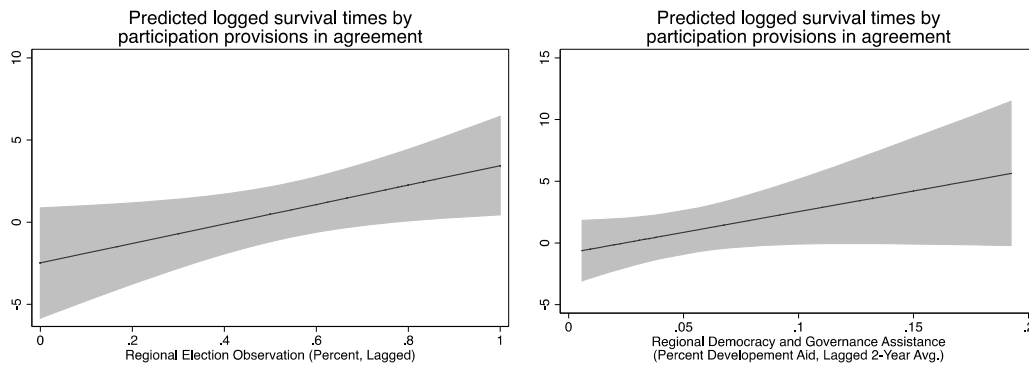
Table A.6.8: Conditional Effect on Conflict Recurrence (Parametric Models)

	Model 10	Model 11	Model 12	Model 13
Participation Provisions	-2.48 (1.71)	-2.35 (2.03)	-0.82 (1.34)	-0.25 (1.29)
Regional Election Observation (Percent, Lagged)	1.02 (1.18)	0.65 (1.61)		
Part. Provisions*Reg. Election Observation (Interaction of Interest)	5.92** (2.76)	5.90** (2.92)		
Regional Democracy and Governance Assistance/ Development Aid (Lagged Two Year Average)			-14.81 (10.17)	-24.30* (12.56)
Part. Provisions*Reg. Dem. and Gov. Assistance (Interaction of Interest)			33.50* (19.94)	28.59 (18.10)
Constant	3.91*** (0.85)	21.09*** (2.30)	5.59*** (0.96)	21.78*** (1.43)
Region, Decade, Interaction		IN		IN
Observations	122	122	107	107
Log pseudolikelihood	-172.4	-164.6	-144.4	-136.1
Sigma	3.40	3.16	3.40	3.08

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. Models based on lognormal distribution.

Reminder that the DV is now “peace survival,” rather than “conflict failure” (in Cox), so the opposite effect is expected.

Figure A.6.6: Predicted Conflict Recurrence (Parametric Models)



Note: The graphs correspond to the estimation of peace survival. Both use lognormal distributions for baseline hazard function. Left-hand side graph corresponds to the estimation of model 10 in the table above, whereas right-hand side graph corresponds to model 12 in the table above.

Additional controls for the estimation of the duration model

Finally, I also examine the full set of control variations using the duration models, as well (not shown in the interest of space but available from the author—the analyses also can easily be run in the data and code provided). The results are similar to those shown using a logit model, and electoral participation provisions have a negative and statistically significant effect on conflict recurrence throughout, as expected.

Codebook Describing the Variables in the Conflict and/or Peace Agreement Datasets

Items in “[]’s” indicate alternative variables used in robustness checks (not included in these data).
Additional information on sources, etc. available from the author upon request.

Identification variables:

region: Region [only as a robustness check in the Conflict data]
ccode: Correlates of War state code [only as a robustness check in the Conflict data]
conflictid: UCDP conflict ID [only in the Peace Agreement data]
iden: Conflict period ID for each dyad (dyad id + year conflict started + year conflict ended) [only in the Conflict data]
nsideb: Opposition actor(s) in the conflict carried forward from Kreutz 2010 [only in the Conflict data]
state: State
paname: Peace agreement name from UCDP Peace Agreement Dataset [only in the Peace Agreement data]
payear: Year
pamg: Rebel group signing the peace agreement [only in the Peace Agreement data]
yr dum: Decade indicator (1975-1984, 1985-1994, 1995-2005) [only in the Peace Agreement data]
coldwar: Following Fortna 2008, I code all agreements before January 1, 1989 as Cold War
p911: Indicator of post-9/11

[Other regional indicators:

regionc: Continental regions (7)
regionu: UCDP regions (6)
regioncow: COW regions (9)
regionorg: Organizational coverage regions (OAS, AU, etc.) (7)
regionsub: Sub-regions based on Hensel and Diehl's 1994 shatterbelt data (9)]

Electoral variables:

outcome_a_first: Indicator of conflict termination using first negotiated peace agreement when multiple agreements occur without a resumption of conflict [only in the Conflict data]
Note: **outcome_a_first**==8 is the same as “propart” in the peace agreement dataset with a few exceptions noted in supplementary document. It indicates a peace agreement with electoral participation provisions. A value of “1” is a peace agreement without electoral participation provisions. A value of “10” means no definitive end with 8 years of active fighting. All other end values are the same as those used by UCDP/PRIO conflict termination dataset (“4” is victory/defeat; “7” is alliance)
altcensor1: Indicator of whether multiple peace agreements occur without a resumption of conflict. Equal to 1 if observation not included in **outcome_a_first**. Equal to 2 if observation included in **outcome_a_first** [only in the Conflict data]
propart: Indicator of electoral participation provisions (with renegotiations without a return to conflict dropped) [only in the Peace Agreement data]
propartNC: Indicator of electoral participation provisions [only in the Peace Agreement data]
propartMT: Cases with missing text in the peace agreement coded as missing]
maxpropart: Indicator coded by peace agreement rather than dyad]
proapart: Indicator of electoral participation provisions and participation [only in the Peace Agreement data]
censored: Indicator that the dyadic peace agreement ended without failure, either due to the end of the data collection or a renegotiation of the peace agreement (without a return to conflict) [only in the Peace Agreement data]
allelec: Indicator of any regular elections, or provisions for elections, coded from Hyde and Marinov 2012 [only in the Peace Agreement data]
elections1: Codes any elections in the deal, differentiating between none, **propart** (=1), and all others (=2) [only in the Peace Agreement data]
otherelec: Indicator of another electoral provision]
transition: Indicator of electoral participation provisions only after a transitional government]

Peace variables:

mbreak: Years of peace following the peace agreement from UCDP (assuming it fails in first month) [only in the

Peace Agreement data]

failure: Peace fails within five years (including allies) [only in the Peace Agreement data]

f10: Peace fails within ten years (including allies) [only in the Peace Agreement data]

anyh5: Peace holds for all UCDP rebel group for five years [only in the Peace Agreement data]

Conflict variables:

duration: Length of dyadic conflict in years (minimum of 1) [only in the Conflict data]

mgduration: Years the militant group fought coded from UCDP [only in the Peace Agreement data]

cduration: Years that the conflict lasted coded from UCDP [only in the Peace Agreement data]

[**kbtech:** Type of conflict (insurgency, conventional, or symmetric non-conventional) hand matched from Kalyvas and Balcells 2010 (missing many groups because they do not produce 1000 battle deaths)]

[**rebpoling1:** Indicator of a rebel wing during prior period of the conflict from Cunningham et al. 2009, which I carry forward up to 8 years unless a new conflict in the dyad breaks out (1 is alleged, acknowledged, or established) (missing groups because they are not coded in Cunningham et al. 2009)]

[**rebpolinglegal1:** Indicator of a legal rebel wing during prior period of the conflict from Cunningham et al. 2009, which I carry forward up to 8 years unless a new conflict in the dyad breaks out (1 is legal) (missing groups because they are not coded in Cunningham et al. 2009)]

[**rebstrength1:** Estimate of rebel strength during prior period of the conflict from Cunningham et al. 2009, which I carry forward up to 8 years unless a new conflict in the dyad breaks out (- is weaker, + is stronger) (missing groups because they are not coded in Cunningham et al. 2009)]

[**rebest1:** rebel best estimate during prior period of the conflict from Cunningham et al. 2009, which I carry forward up to 8 years unless a new conflict in the dyad breaks out (missing groups because they are not coded in Cunningham et al. 2009)]

irebest: Logged “rebest” (missing groups because they are not coded in Cunningham et al. 2009)

balance1: Based on Cunningham et al. 2009 “rebstrength,” but in this case, 0 means parity, 1 means either side somewhat stronger, and 2 means either side much stronger; 2005 cases coded by hand (missing groups because they are not coded in Cunningham et al. 2009, but did add 2005 cases based on author’s own notes, which are in the variable creation notes on the PA data)

cumint: Major war reaching 1000+ battle deaths up to that point (including current year) coded from UCDP, which I carry forward up by conflict (missing groups because a few additional cases are in the Conflict Dataset based on Kreutz 2010’s coding, which are not in UCDP, or are missing in the Lacina et al. 2005 data)

[**totalbd:** Battle deaths (maximum) up to that point (including current year) from Lacina et al. 2005 v3.0, which I carry forward up by conflict (missing groups because a few additional cases are in the Conflict Dataset based on Kreutz 2010’s coding, which are not in UCDP, or are missing in the Lacina et al. 2005 v3.0 data)]

ltot: Logged “totalbd” (missing groups because a few additional cases are in the CR set based on Kreutz 2010’s coding, which are not in UCDP, and due to a few cases of long gaps) [only as a robustness check in the Conflict data]

lmilper: Logged “ulmilper”

[**ulmilper:** Troops coded from Singer et al. 1972 replacing “-9” with missing, lagged]

[**lmilexpc:** “lmilex” per capita]

[**lmilperpc:** “lmilper” per capita]

[**lmilex:** Military expenditure (% of central government expenditure) coded from Singer et al. 1972 replacing “-9” with missing, lagged]

[**lcinc:** COW capability scores, including military expenditure, disputes, power status and distance between states from Singer et al. 1972, lagged]

[**mtnest:** Estimated % mountainous terrain from Fearon and Laitin 2003 (missing “micro-states”)]

lmtnest: Logged “mtnest” (missing “micro-states”) [only as a robustness check in the Conflict data]

[**conflict_border:** Indicator of a boarder country with at least one active conflict from UCDP. Indicator of a border country with at least one active conflict from UCDP. Borders are defined by Correlates of War Project, using the “Direct Contiguity Data, 1816-2006. Version 3.1,” available online at <http://correlatesofwar.org>]

Aims variables:

terr: Center-seeking or territorial conflict coded from UCDP (interestingly Sudan is coded differently in the UCDP conflict sets and in the UCDP Peace Agreement Dataset, so mine diverge on this coding, as well).

totalg: Indicator of non-total goals based on Walter 2004 from Kreutz 2010, which I carry forward by conflict (because there is no variation across groups within conflicts in these data (missing groups not coded by Kreutz 2010

since he is focused on terminated conflicts for this set, but did add peace agreement cases PA based on author's own notes, which are noted by the "flag" variable in the PA data)

contraband: Evidence of significant contraband financing of rebels hand coded from Fortna 2008 and supplemented by Fearon and Laitin 2003 and author's own notes (see variable creation notes on the PA data, but still missing groups in the CR data) [only as a robustness check in the Conflict data]

identity1/ethnic_eck: Indicator of ethnic mobilization from Eck 2009, which I carry forward by conflict (missing groups because they are not coded in Eck 2009)

kbmarx/marxist: Hand matched from Kalyvas and Balcells 2010 [only as a robustness check in the Conflict data]

[ethfrac: Ethnic fractionalization based on Soviet Atlas plus estimates for missing in 1964 from Fearon and Laitin 2003 (missing "micro-states")]

[ef: Ethnic fractionalization based on Fearon 2002 from Fearon and Laitin 2003 (missing "micro-states")]

[plural: Share of largest ethnic group based on Fearon 2002 from Fearon and Laitin 2003 (missing "micro-states")]

[second: Share of second largest ethnic group based on Fearon 2002 from Fearon and Laitin 2003 (missing "micro-states")]

[numlang: Number languages in Ethnologue greater than at a minimum 1% of the population, 1million from Fearon and Laitin 2003 (missing "micro-states")]

[relfrac: Religious fractionalization from Fearon and Laitin 2003 (missing "micro-states")]

[plurrel: Size of largest confession from Fearon and Laitin 2003 (missing "micro-states")]

[minrelpc: Size of second largest confession from Fearon and Laitin 2003 (missing "micro-states")]

[muslim: Percent Muslim from Fearon and Laitin 2003 (missing "micro-states")]

[off: Binary indicator of conflicts in which the majority ethnic group has more than 49 percent and the minority has more that 7 percent based on "plural" and "second" (missing "micro-states")]

[roff: Binary indicator of conflicts in which the majority religious group has more than 49 percent and the minority has more that 7 percent based on "plurrel" and "minrelpc" (missing "micro-states")]

Agreement variables:

pastagree: Number of prior peace agreements (failed)

allfac: Number of all active rebel groups (those that have not definitively ended and are within 8 years of fighting registered in UCDP)

[pafacnum: Number of active militant groups that sign the peace agreement from the UCDP Peace Agreement Dataset as "no_dyad"]

nosignfac: Number of active militant groups that do not sign [only in the Peace Agreement data]

morenegs: Indicator that more negotiations were to occur [only in the Peace Agreement data]

[misstxt: Indicator of missing full text]

sharegov: "shargov" from the UCDP Peace Agreement Dataset [only in the Peace Agreement data]

interim: "interrim" from the UCDP Peace Agreement Dataset [only in the Peace Agreement data]

ssr: "intarmy" from the UCDP Peace Agreement Dataset [only in the Peace Agreement data]

patype: "pa_type" from the UCDP Peace Agreement Dataset [only in the Peace Agreement data]

cease_ssr_ddr_withd_pp_intgov_intciv_elections_interim_natalks_sharegov_aut_fed_ind_ref_shaloc_regdev_cul_demarcation_loggov_amn_pris_recon_reaffirm_co_impl_outlin_justice_prov_mil_prov_pol_prov_terr_prov_pko_ended_dyvi05_pafacnum: Additional provisions from the UCDP Peace Agreement Dataset (including renamed ones above) [only in the Peace Agreement data]

[part_kreutz: Indicator of conflicts that ended in partition from Kreutz 2010, which I carry forward by conflict (because there is no variation across groups within conflicts in these data) (missing groups not coded by Kreutz 2010 since he is focused on terminated conflicts for this set)]

[partv2: Indicator that a conflict prior to that date had resulted in a partition based on Sambanis 2000; updated using Schulhofer-Wohl and Sambanis 2009]

Regional legislative election observation variables (based on Hyde and Marinov 2012):

nexlem: Regional percentage of elections observed excluding the state in question (lagged)

lelec: Number of elections in the region in the past year (lagged) [only as a robustness check in the Conflict data]

[plelecmon: Regional percentage of elections observed including the state in question (lagged)]

[nexem: Regional percentage of elections observed excluding the state in question]

[plecmon: Regional percentage of elections observed including the state in question]

[elec: Number of elections in the region in the past year]

[nexllem: Regional percentage of elections observed excluding the state in question (lagged 2 years)]

[**plleecmon**: Regional percentage of elections observed including the state in question (lagged 2 years)]
[**lleec**: Number of elections in the region in the past year (lagged 2 years)]
[**all3ex**: All three variables (nexem, nexlem and nexllem)]
[**lag2ex**: Both lagged variables (nexlem and nexllem)]
[In addition “r” denotes an alternative coding from NELDA that includes ALL elections, adding presidential and constitutional.]

Regional democracy and governance assistance variables:

regdg: Regional percentage of bilateral assistance devoted to democracy and governance in the region (calculated using the same regions as for international election observation, millions 2000 \$, lagged 2-year mean because source database reported actual appropriations but disbursements may have occurred in the year following the appropriation, so 1991 covers Oct. 1, 1989 to Sept. 30, 1990) from Finkel et al. 2008 (missing all years before 1991 and after 2005, given the lag)*

*Note: regional estimate is missing Angola in 1989 (because set begins in 1990), but I replace it with the value from 1990 since they overlap in the PA data given how small the sample is.

Strategic and special relationship variables:

milaid: Binary indicator of any U.S. military aid (“usmilaid” so also lagged)

oil: Binary indicator of a positive value of oil production (“oil_value_2000”), lagged*

*Note: value is missing for Senegal, but presumably positive based on author’s research, so replaced as such in the PA data given how small the sample is

[**oil_value_2000**: Value of oil production (volume multiplied by the world price for oil or gas) based on 1932 to 1969, the US Geological Survey *Minerals Yearbook*, 1970-2000, World Bank’s ‘Wealth of Nations’ database, and 2001-2009, the US Energy Information Administration website for international energy statistics from Ross 2011 (2000 dollars), lagged (missing states because missing in Ross 2011, or not clear which state in that set for early Yemen years)]

colbrit: British colony from Fearon and Laitin 2003 with hand code of micro states.

colfra: French colony from Fearon and Laitin 2003 with hand code of micro states.

[**usmilaid**: U.S. military aid coded from the Greenbook in constant dollars, lagged (with missing coded as no aid since USAID, which keeps the Greenbook, notes that “no data available” means that none was provided through that program in that year, except for the U.S. and North and South Yemen, which were not clear in the data)]

[**lusmilaid**: Logged “usmilaid”]

[**oilres**: Oil reserves from Lujala et al. 2007*]

*Note: all of the missing values were coded as no reserves, except post-2005, when all had reserves based on the author’s research.]

[**col45**: colonies as of 1945 coded from Stein no date.]

[**USally**: Indicator of an alliance with the U.S. from Leeds et al. 2005 (missing years 2005 and on)]

[**USallyod**: Indicator of an offense-defense alliance with the U.S. from Leeds et al. 2005 (missing years 2005 and on)]

[**Imp5ally**: Indicator of an alliance with any of the permanent five members of the U.N. Security Council from Leeds et al. 2005 (missing years 2005 and on)]

[**Imp5allyod**: Indicator of an offense-defense alliance with any of the permanent five members of the U.N. Security Council from Leeds et al. 2005 (missing years 2005 and on)]

[**mpally**: Indicator of an alliance with any of the major powers during this time period (the U.S., the U.K., France, Germany after 1990, Russia, China, and Japan) from Leeds et al. 2005 (missing years 2005 and on)]

[**mpallyod**: Indicator of an offense-defense alliance with any of the major powers during this time period (the U.S., the U.K., France, Germany after 1990, Russia, China, and Japan) from Leeds et al. 2005 (missing years 2005 and on)]

Peacekeeping variables:

unpkIN: Indicator of UN peacekeeping mission on the ground when the agreement is signed based on Nygard et al 2011, and adding from World Bank data (extending Sierra Leone and Cambodia). The cases match the U.N.’s list of Peacekeeping Operations (<http://www.un.org/en/peacekeeping/documents/operationslist.pdf>), which do not include “political missions” as in Guatemala pre-1997. I drop all primarily interstate peacekeeping and apply the Kosovo mission to Serbia and the East Timor mission to Indonesia until independence. These are all coded by country, but this changes the coding in almost no cases.

pastun: Indicator of any past UN peacekeeping mission from the same sources as “pk” [only as a robustness check in the Conflict data]

ds_enforce: Alternative indicator of Chapter VII missions coded by Doyle and Sambanis 2000 [only as a robustness check in the Conflict data]

troopsum1000: Number of personnel in UN peacekeeping missions—troops—from the World Bank data (1000s) (missing for all cases not coded as U.N. missions by the World Bank data) [only in the Peace Agreement data]

[unpk: Indicator of UN peacekeeping mission on the ground or mandated when the agreement is signed from the same sources as “unpkIN”]

[postpa: Indicator of indicator of whether the UN peacekeeping mission was on the ground only after the peace agreement was signed]

[pk: Indicator of any peacekeeping mission is coded based on Mullenbach 2005, but examined qualitatively by the author where data is missing]

[unc7: Indicator of Chapter VII missions coded based on Fortna 2008, also applying the Kosovo mission to Serbia and the East Timor mission to Indonesia until independence.]

[ms_guar: Indicator of an enforcement guarantee following the Mattes and Savun 2009 coding of enforcement, which incorporates Fortna 2008 + their own additional cases outside of the U.N.]

Democracy variables:

polity2: Democracy variable (-10 through 10) from Marshall et al. 2006 (Polity 2), lagged (missing values when Polity 2 is coded as missing or prior to state’s existence)

[lpolity2: Democracy variable (-10 through 10) from Marshall et al. 2006 (Polity 2), lagged to before the conflict (missing values when Polity 2 is coded as missing or prior to state’s existence)]

polity2demo45: Indicator of past “democracy_polity” at any time from 1945 to date.

regdemo_p: Regional percentage of democracies out of all states, “democracy_polity,” using the same regions as for regional election observation

[mean_polity_demo: Regional average “polity2” score for all countries in the region using the same regions as for regional election observation]

mag5_change1: Absolute change in “polity2” compared to the five years ago [only in the Peace Agreement data]

change5: Dummy variable indicating whether the country experienced a change in regime type compared to the five years ago

$$\text{change5} = \begin{cases} 1 & \text{if changed from autocracy to democracy} \\ 0 & \text{if there was no regime change} \\ -1 & \text{if changed from democracy to autocracy} \end{cases}$$

[mag_change1: Absolute change in “polity2” compared to the past year]

[change1: Indicator of whether the country experienced a change in regime type compared to the past year]

[polity2_border: Average polity score of neighboring countries. Borders are defined by Correlates of War Project, using “Direct Contiguity Data, 1816-2006. Version 3.1,” available online at <http://correlatesofwar.org>. Polity2 score comes from the Marshall et al. 2006 database]

ldemocracy: Indicator of democracy from Cheibub et al. 2009, lagged (missing values when prior to state’s existence)

[ldemocracy: Indicator of democracy variable coded from Cheibub et al. 2009, lagged to before the conflict (missing values when prior to state’s existence)]

[anydemo_45: Indicator of past “ldemocracy” at any time from 1945 to date]

lregime: Regime variable (0=Parliamentary democracy, 1=Mixed (semi-presidential) democracy, 2=Presidential democracy, 3=Civilian dictatorship, 4=Military dictatorship, 5=Royal dictatorship, so most to least inclusive) from Cheibub et al. 2009, lagged (missing values when prior to state’s existence)

[lgo_d: This variable corresponds to the maximum average polity score among all IGOs to which the country is member of in that year. This variable comes from Pevehouse 2002 database. NOTE: average polity scores for all IGOs do not take into account the polity score in the corresponding country]

[lgo_dsd: This variable corresponds to the standard deviation of the polity scores to which the country is member of in that year]

Socio-economic variables:

Penn World Table Version 7.1. Missing values correspond to data not available in original database—

pop_penn7_1: Population (lagged)

rgdpch7_1: PPP Converted GDP Per Capita (Chain Series), at 2005 constant prices (lagged)

openk: Total trade as a percentage of GDP (lagged)

[growth1_7_1: Growth of GDP (t-1 to t) (lagged)]

WDI. Missing values correspond to data not available in original dataset—

inf_mortality: Infant mortality (per 1,000 births) [only as a robustness check in the Conflict data]

l_inf_mortality2: Lagged growth Infant mortality (from t-2 to t-1) [only as a robustness check in the Conflict data]

Aid Data (missing values correspond to data not available in original dataset; when a country has no records in AidData, the following variables are equal to zero)—

share_aid: Share of ODA in total GDP in US 2005 constant prices

[oda_aidta: ODA in constant US 2009 dollars]

Other—

member: Member of either GATT or WTO (=1 Yes)

ICRG variables (the following countries do not appear in the original ICRG data set: Afghanistan, Bosnia and Herzegovina, Burundi, Cambodia, Central Africa, Chad, Comoros, Djibouti, Eritrea, Georgia, Laos, Lesotho, Macedonia, Mauritania, Nepal, Rwanda, Tajikistan, Uzbekistan; missing values in the remaining countries correspond to i) years outside the period of time covered by the original dataset 1984-2011 (e.g., Colombia 1973-1983); or ii) data not available for that year (e.g., Croatia 1991-1994))—

corruption: Corruption

bureaucratic: Bureaucratic quality

laworder: Law and order